Notebook, N-10-01-02.1

2½ gms flake To Cube with bulk 10 lbs Cubic foot

			Cold	50	100
21 Hole 005 spiral 707 ½ w filtered dried high heat - 10 of Take 24 g		5452	1167	1185	1175
		5453	1200	1200	1170
21% KOH	5.56	5454	1185	1172	1135
21 Hole 005 Spiral 707 ½ wash not filtered, dried low heat 10 of 24 green.		5455	1155	1107	1075
		5456	1157	1065	1025
21% KOH	5.04	5457	1180	1120	1117
21 Hole 005 No wash filtered, dried low heat 707 10 of 24 green		5509	1196	1130	1095
		5510	1212	1177	1172
	5.49	5511	1215	1117	1092
21 Hole 005 Spiral 707 ½ wash filtered dried low heat, 10 of 24 green 21%		5530	1183	1165	1150
		5531	1157	1150	1137
	5.24	5532	1165	1137	1127
Dup 5530 707 21 Hole 0035 Spiral.		5533	1217	1177	1155
		5534	1207	1182	1157
		5535	1210	1220	1180
Dup 5530 707 26 X 30 005 Spiral		5536	1145	1115	1075
		5537	1137	1095	1097
		5538	1177	1050	1100
		5			

5846 - 400th run changed Fe now on run with new Fe,

→ This

			Cold	50	100
21 Hole 005 1½ spiral 3½ wt 708 10 of 24 green ½ wash not filtered dried low heat. 27% KOH 2 grms LiOH		5846	1337	1375	1370
		5847	1337	1345	1370
	5.18	5848	1337	1365	1362
25% KOH 2 grms LiOH		5849	1307	1302	1317
		5850	1320	1325	1350
	5.19	5851	1320	1322	1400
23% KOH 2 grms LiOH		5852	1260	1297	1350
		5853	1227	1252	1287
	5.23	5854	1232	1275	1312
21% KOH. 2 grms LiOH		5855	1192	1232	1232
		5856	1187	1212	1210
	5.22	5857	1192	1220	1217
19% KOH 2 grms LiOH.		5858	1170	1210	1187
		5859	1180	1180	1147
	5.24	5860	1180	1247	1212
21 Hole 005 1½ spl No 2 708 - 10 of 24 - 21% KOH. 2 grms LiOH 68 flake		5992	1162	1177	1093
		5993	1157	1197	1190
	4.98	5994	1145	1193	1173
Dup 5992 17 KOH 2 LiOH		5995	1125	1180	1133
		5996	1120	1163	1087
		5997	1120	1150	1110
Dup 5992 13% K 2 LiOH		5998	1100	1133	1060
		5999	1115	1153	1087
		6000	1100	1123	1087

150	200	250	300	350	400	450	500	
1187	1090	1127	1153	1130	1117	1140	1060	
1157	1020	1037	1070	1060	1067	1067	1067	
1127	1040	1030	[illegible]	[illegible]	1083	1127	1107	
1060	907	902	[illegible]	923	913	950	907	
993	[illegible]	[illegible]	943	933	910	953	937	
1097	[illegible]	[illegible]	923	957	930	980	930	
1102	1057	1053	657*	1047	1040	1067	1043	
1167	1153	1167	1150	?				
1097	1080	1087	1107	1107	1087	1137	1133	550
1172	1190							
1145	1163	1193	1150	1143	1050	1040	960	1013
1137	[illegible]	1107	[illegible]	[illegible]	1073	1053	997	1023
1147	1170	1093	1087	1057	1060	1030	1000	1000
1140	[illegible]	[illegible]	1000	1020	1010	990	960	977
1185	1197	[illegible]	[illegible]	[illegible]	1067	1037	1033	1037
1077	1067	1030	1000	1033	1020	1000	1023	1010
1097	1097	1090	1067	[illegible]	1067	1067	977*	1000
1075	1067	1043	1023	1023	1020	973	983	1007

Co

Co

350 Run 5846 to 5854 on 1400 to ½

450 new Tc

150	200	250	300	350	400	402	450
1303	1220	1243	1050	1097	993*	1200	983
1290	1080	1203	1067	1113	987	1200	1000
1307	1133	1133	1037	1000	1000	1243	1063
						450	
1087	933	1223	1193	[illegible]	1213	1090	
1077	1080	1247	1133	1157	1050	1090	
1073	883	1227	1100	1097	1060	973	
1327	887	1280	1155	1200	1077	1043	
1247	533	1163	1110	1097	1000	973	
1310	1133	1220	1143	1067	1267	1027	
1040	447	987	980	1017	1033		
1037	1007*	1040	1057	1067	1047		
1057	920	1063	1077	1030	983		
1100	817	990					
1077	497	977					
983	903	860					
997	1027	883	867				
1103	1093	1050	1033				
1110	1117	1037	1050				
1063	1023	1007					
980	997	983					
980	993	980					
937	960						
937	960						
980	977						

Co

Co

Co

Co

Co

Co

Co

Co

Co

Plating off grids - they never plated [illegible] LiOH then flaked - looks ok - put lithium in new grids or 21K - 2 LiOH -

		Cold	50	100	150	200	250	300	350	400	4	
21Hole 1½ spl 708 No 2 - 5f 24 g - ½ thick 21% KOH. 2 grm LiOH. 70f 5.69	6103	1122	1213	1170	1147	1053	1087	1013	847	893	Co	
	6104	1137	1230	1077	1177	1063	1117	973	893	897		
	6105	1115	1190	950	1160	1090	1107	977	927	950		
21% KOH 2 LiOH. 3 grms ferrous hydroxide	6202	1002	1030	1043	1083	930	973	1023				
	6203	1000	977	1000	1040	930	940	957		Co		
	6204	1027	1010	1033	1050	957	953	957				
										400	cold	
21Hole 005 1½ spl 24 No 2: 708- thru 30 10 f No 71 streaky - new 20% left. 21% KOH 100 Milg LiOH. COLD	6714	953	950	983	1010	1050	1030	1067	1063	1033 1133	628	
	6715	977	960	997	1030	1067	1050	1100	1067	1043 1147	600	
	6716	980	977	987	1043	1077	1057	1117	1093	1067 1197	600	
Dup 6714 21% 200 Milg LiOH COLD	6717	977	987	1027	1050	1083	1060	1117	1103	1083 1190	650	
	6718	957	970	1000	1010	1057	1050	1097	1067	1050 1160	623	
	6719	970	973	997	1027	1067	1050	1097	1080	1057 1170	667	
21% 500 Milg LiOH COLD	6720	987	1037	1067	1073	1110	1110	1163	1133	1110 1233	757	
	6721	957	1037	1053	1063	1110	1100	1143	1123	1083 1220	690	
	6722	960	990	1007	1027	1063	1073	1117	1083	1067 1210	737	
21% 1 grm LiOH COLD	6723	980	1020	1010	1027	1057	1067	1110	1063	1057 1190	753	
	6724	997	1033	1033	1050	1060	1093	1123	1067	1043 1200	763	Co
	6725	973	1033	1043	1050	1083	1100	1137	1097	1067 1217	803	
21% 2 grms LiOH COLD	6726	973	983	987	970	967	1050	1020	927	917 1167	810	
	6727	963	1017	1013	1010	1043	1063	1087	1043	1023 1160	813	
	6728	953	1020	1017	1010	1043	1067	1097	1037	1023 1170	843	
21% 3 grms LiOH COLD	6729	990	1041	1030	1040	1060	1053	1107	1040	1030 1203	640	
	6730	977	1030	1017	1010	1020	1027	1067	983	980 1157	867	
	6731	993	1047	1043	1047	1060	1053	1117	1040	1023 1193	853	
27% 1 grm LiOH COLD	6732	933	897	867	853	877	937	993	933			
	6733	970	1017	993	950	970	980	1050	1040	Co		
	6734	930	917	867	867	900	940	977	960			

		Cold	50	100	150	200	250	300	
21 Hole 005 No 2 green 708 5 soft f thru H No 78 f Layer Loading - 1011 Ka Ye- 21% KOH 1 grms LiOH.	6835	1035	1010	1020	1037				Co
	6836	1063	1010	1053	1020				
6.05	6837	1060	1067	1143	1073				
Dup 2 grms LiOH.	6838	1023	1077	1177	1130				Co
	6839	1003	1050	1130	1087				
6.11	6840	1020	1090	1127	1097				
21 Hole 1½ 3 lbs 708 Allision got flour off - washed - dried 1½ hours hot plate 86 f not H - 7 fl 24 g - 21% COLD	7157	1057	1010	977	990	1010			Co
	7158	1077	1023	990	1010	1023			
566	7159	1070	1043	993	1010	1027			
Dup 7157 21% KOH 2 grms LiOH	7160	1063	1122	1147		1063			Co
	7161	1063	1117	1160		1080			
5.47	7162	1027	1047	1097		1063			
Dup 7157 21% KOH. 2 grms LiOH. COLD	7163	1037	1067	1043	1070	1063	1060	1027 1087	Co
	7164	1040	1090	1057	1087	1073	1043	1030 1083	
5.69	7165	1053	1100	1067	1097	1090	1067	1048 1107	
21 Hole 1½ 3½ 708 83 f 24 G 7 f green ox & reduced H 1 hour dull red 21% KOH -	7248	1147	1050			1017	993		Co
	7249	1150	1010			983	983		
5.84	7250	1160	1090			940	933		
21 Hole C05 Reg 83 f ox same as in 7248 7 f 24 708 21% KOH 2 grms LiOH.	7284	1140	1067		970	897			Co
	7285	1120	1123	Skip J	990	913			
5.99	7286	1117	1173		1080	927			
Reg tubing green feed on top f 83 f ox & red H to high - balled up. 7 fl 24 g 21% KOH 2 grms LiOH.	7290	1143	1103	957	Co				
	7291	1133	1067	973					
5,82	7292	1123	1033	980					

		Cold	50	100	150	200	250	300.	
Reg lithia 1½ 3½ 237 83f ox slower lower heat, slowly reduced 11 1½ hours dull red not fused together 7 ft 24 g 708 Layer [illegible]	7299	1120	1053	1017	[illegible]	1050	1600		Co
	7300	1103	1030	1030	[illegible]	1050	1020		
21% KOH COLD 6.07	7301	1103	1010	1023	[illegible]	1043	993		
Dup 7299 21% KOH 2 LiOH	7302	1037	1130		967	833			Co
	7303	1020	1133	Skipd	983	863			
613	7304	1007	1117		973	817			
Dup 7299 21% KOH 2 LiOH	7305	1003	1120	1110		1063	1000	993 1077	Co
COLD	7306	987	1130	1143		1100	1023	983 1067	
613	7307	997	1130	1150		1133	1063	1017 1110	
Dup 7299 Except 707 RA ½ w filled, low h 21%	7308	1097	1033		1010	1020	1000		Co [illegible]
	7309	1117	1063		1080	1053	1033		
616	7310	1117	1090		1097	1083	1033		
Dup 7299 RA 707 ½ w filled [illegible] low heat Chgd 1st run ¼ rate	7311	1158	1130		1117	1110	1087		Co [illegible]
	7312	1100	1047		1033	1063	1023		
21% KOH. 604	7312.	1103	1067		1063	1093	1067		
Reg lithia 100 f 3% Cu 7 ft 24 gr 708 Soaked in acetate [illegible] then boiled KOH.	7351	1107							
	7352	1110							
21% KOH 5.81.	7353	1123							
Reg lithia 100 f 3% Cu 708 – Layer [illegible]	7354	1057	1063	1113		1067			Co
21% KOH 2 grams LiOH	7355	1040	1090	1130		1093			
5.80	7356	1037	1060	1087		1050			
Dup 7354 21% KOH. 2 LiOH	7357	1040	1087	1107		1080	1043	1037 1123	Co
COLD	7358	1047	1107	1140		1100	1093	1067 1153	
588	7359	1030	1080	1093		1067	1043	1023 1117	

			50	100	150	200	250	300	
Dup 7354	7360	1030	997	Skip	1053	1037	1023	933	Co
25% KOH 2 grms LiOH.	7361	1057	1067		1087	1087	1093	1000	
5.89	7362	1063	1113		1183	1187	1173	1067	
Dup 7354 3 lb cot	7375	1020	1143	Skip	1127	1090	1043	1067	Co
21% KOH 2 LiOH.	7376	1030	1110		1103	1050	1063	1027	
557	7377	1033	1110		1093	1043	980	1040	
Dup 7354	7378	1060	963	917					
2½ lbs cot	7379	1100	1047	987					
21% KOH - 548	7380	1080	1013	960					
Dup 7354	7381	997	1090	Skip	1067	1017	1040	1013	Co
2½ lb cot	7382	997	1097		1087	1037	1053	1013	
21% KOH 2 grms LiOH 548	7383	993	1083		1093	1050	1067	1050	
Reg tubes - 91 f	7408	1040	1147	1160	1153	1050			Co
7.1 f 23.8 708 flake brittle. not long hairy kind -	7409	1043	1147	1190	1183	1150			
21% KOH. 2 LiOH. 569	7410	1043	1107	1107	1060	1037			
Dup 7408	7411	1040	1103	1120	1090	1107			Co
21% KOH 2 LiOH	7412	1040	1100	1113	1093	1107			
COLD 5.65	7413	1037	1103	1113	1093	1107			
Reg tubes 105 f	7417	1027	1160	1130	1093	980	1250070 1103 1067		Co
7 f 24 no 2 gr	7418	1020	1107	1113	1043	983	1000 990		
21% KOH 2 LiOH. 5.74 -	7419	1023	1107	1113	1063	977	1003 100 change		changed 7z
Dup 7417	7420	1033	1100	1107	1080	1090	Change 7-25	Rej Co	
21% KOH 2 LiOH.	7421	1013	1090	1103	1080	1100			
COLD 573	7422	1037	1067	1073	1057	1067			

				100	150	200	250	
Reg lube 100A flake	7435	1047	1135	1093	1093			
7 f 24 gr No 2	7436	1063	1147	1157	1110		Co	
21% 2 grms LiOH - 572	7437	1053	1133	1140	1093			
Dup 7435	7438		1123	1133	1127	1140		
21%KOH 2 LiOH	7439	Tst	1133	1153	1127	1133	Co	
COLD 570	7440		1120	1117	1123	1123		
Reg lube 105A ox peacock Reduced H low temp 2 hours	7458	1033	1130	1057	927			
21%KOH 2 LiOH.	7459	1030	1103	957	933		Co	
600	7460	1030	1078	947	960			
Dup 7458	7461	1037	1103	1103	1077	1037		
21% 2 LiOH	7462	1033	1103	1100	1100	1050		Co
COLD 600	7463	1033	1090	1077	1073	1023		
Dup 7458	7464	1053	1110	1123	1067			
23% KOH 2 LiOH -	7465	1060	1073	1100	1047		Co	
6.07	7466	1037	1040	1073	1030			
Reg lube 107A f 7.1 f 24.2 No 2 703 Peacock—	7470	1060	1227	1133	1107			
	7471	1060	1253	1033	1153		Co	
21%KOH 2 LiOH 576	7472	1060	1233	1177	1130			
Dup 7470	7473	1067	1193	1170	1190	1143	1083 1143	
21%K 2 grms LiOH	7474	1067	1147	1143	1143	1097	1083 1147	Co
COLD 576	7475	1067	1143	1133	1140	1073	1043 1110	

Long lube 250 cold
7447 - 1479
7448 1546
7449 1454

ditto 300th ½
1492 1546
1546 1613
1429 1458

350 Run
7447 — 1471 1558
7448 1546 1631
7449 1433 1492

400th Run
7447 1450 1533
8 1575 - 1658
9 1450 1496

				100	150	
Reg tubes 99½ f ox peacock 7.3 f Old 707 21% KOH	7494	1000	867	833		Co
	7495	1023	983	1007		
	7496	993	863	873		
Reg tubes 99½ peacock 708 green soaked in $CuSO_4$ dilute washed little - pressed in boil KOH. green not black 21% KOH 5.90	7499	1137	1043	1040	1000	Co
	7500	1140	1023	1000	993	
	7501	1137	1063	1033	1030	
Dup 7499 21% KOH. 2 grms LiOH	7502	967	1127	1067	933	Co
	7503	1010	1077	1073	960	
	7504	1030	1097	1083	950	
Reg tubes - 708 boiled conc LiOH. washed out - 100 A f ox higher than Peacock 7 f 24 7 21% KOH 624	7505	1083	1043	1013	973	Co
	7506	1077	1023	963	933	
	7507	1073	1053	997	987	
Reg tubes 708 100 A ox higher than Peacock 21% KOH. 3 grms Lithia Chloride 598	7511	1047	1127	1093	1040	Co
	7512	1050	1147	1100	1060	
	7513	1030	1100	1047	1020	
Dup 7511 21% KOH 5 grms Lithia Chloride 599	7514	1023	1167	1127	983	Co
	7515	1033	1167	1153	1050 xx	
	7516	1040	1127	1063	1030 x	
Reg tubes oxidized black — Reduced H. had matte surface — 7 f 100 A ox black 24 708 21% KOH 2 grms LiOH 596	7529	1007	903	893		Co
	7530	1007	1023	933		
	7531	1000	1027	940		
Dup 7499 - The green soaked $CuSO_4$ - 21% —	7532	1117	990	960	947	Co
	7533	1110	1053	1030	1000	
	7534	1123	1023	977	950	

			Cold	50	100		150	200	250		300	1/2	Hot	
Reg tubes 708 soaked 12 grms Cobalt Sulphate gene ox ff 7.3 24 g — 21% KOH.	577	7547	750	833	867	Co								
		7548	720	783	797									
		7549	720	800	833									
											350	1/2	Hot	
Dup 7547 21% K 2 grms LiOH.	577	7550	877	1060	990	Co.					1093	1197	600	Co
		7551	863	1050	1010						1140	1237	267	
		7552	880	1087	1040						1143	1263	520	
Reg tubes 708 g mixed with strong emulsion phono grafite see if good – 21% KOH.	5.96.	7571	1157	957	833	Co								
		7572	1157	953	800									
		7573	1147	993	887									
Dup 7571 21% KOH 2 LiOH.	585	7574	1153	1133	1000	Co								
		7575	1153	1100	1000									
		7576	1127	1007	890									
Reg tubes 7 gene f 708 soak Conc Bismuth hydrox in NH4Cl 4 min wash quick – boil KOH. 21% KOH.	638	7619	1000	1033	1040		1017	963	963	Co	943	967	283	Co
		7620	1027	1053	923		1017	953	953		867	897	253	
		7621	1007	1023	990		983	960	953		917	963	280	
Dup 7619 21% KOH 2 grms LiOH	637	7622	1097	1267	1297		1253	1083	1913 1373	633	new Fe 1167	1317	830	
		7623	1107	1270	1260		1170	960	880 1373	677	1140	1293	677	given to Hall
		7624	1117	1267	1283		1240	1083	1983 1850	650	1160	1300	790	
Dup 7619 Except green soaked 1 hour in Bi sol not washed – dried – boiled KOH – 7 ff 24 g – 21%	616	7625	980	1023	930		983	890	907		877	973	317	put in 2 LiOH & Run hot again →
		7626	980	927	917		873	810	793		700	713	297	
		7627	970	957	980		1000	900	927		913	973	360	
~~Dup 7625~~ 21% KOH ~~2 grms~~ LiOH	617	7628	1067	1170	1140		1280 Φ	1030						
		7629	1063	1227	1210		1277	990						
		7630	1067	1217	1267		1253	970						

Φ this result when changed now 250 Hot 250 Iron was hurt – perhaps by Bi guess not

Ordered Hooper run these continuously on board April 2. 1908

7628 – since April 2 60 cal –

	1/2
1283	1400
1203	1317
1283	1363

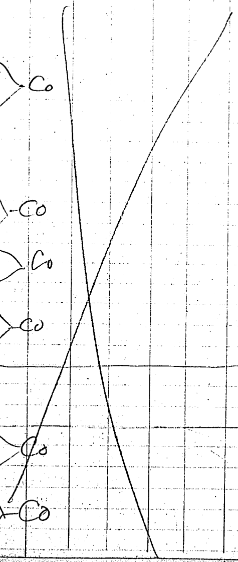
Run on board 300 times Cold 200 hot now 1157 – 1157 – 1137

July 2nd put up with new Fe to run cold again –

		Cold	50	100		150	200	250	Hot	
21 Hol-005 1½ 3½ 237 108 Req Ni f not ox	7631	1107	943	927		917				
7 f 24 708	7632	1127	1030	1037		1030				Co
21% KOH – 556	7633	1120	1027	1047		1027				
Dup 7631	7634	1057	1153	1153		1113	1040	1017		
21% 2 gm LiOH.	7635	1060	1197	1157		1113	1047	973		Co
	7636	1060	1183	1153		1133	1067	1017		
Dup 7631	7637	1063	1110	1117		1147	1110	1067 1150		
21% 2 LiOH COLD	7638	1040	1097	1097		1110	1060	1060 1150		Cu
	7639	1060	1133	1150		1133	1113	1083 1160		
Req tubes 7.4 f 24 708 108 B not ox	7640	1037	893	900						
	7641	1090	983	967	Co					
21% KOH	7642	1117	1013	1017						
Dup 7640	7643	1060	1023	1033		1133	1017	993 1147	527	
21% KOH 2 LiOH.	7644	1047	1147	1113		1133	997	907 1103	0 557	Cd
	7645	1040	1010	1067		1053	1000	1033 1130	557	
Dup 7640	7646	1043	75 1083	75 10						
21% K 2 LiOH COLD	7647	1040	1083		Cd					
	7648	1020	1097							
Req tubes genl ox f 7 ft 24 708	7664	1070	943	893						
green soaked Titanium Sol	7665	1050	1023	1000	Co					
OrS - 24.3 9 7ft 21% K	7666	1057	1030	1013						
Dup 7664	7667	890	1160	1030		960				
21% K 2 LiOH.	7668	900	1150	997		887				Co
	7669	927	1150	1053		927				

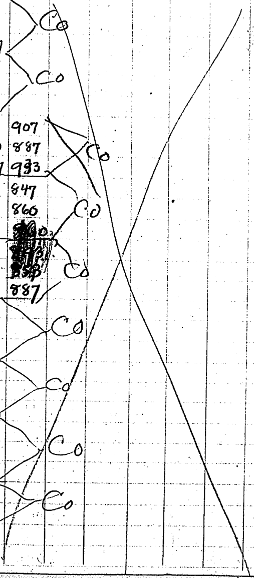
X Changed off LiOH.

		Cold	50	100	150		
Reg Dup 7668 Except green leached out by NH_4 NH_4SO_3 - no KOH - 1 fl 24 708	7670	1140	1080	1060			
	7671	1157	1040	1033			
21% K	7672	1140	1020	1013			
Dup 7670	7673	1073	1223	1107	1017	Co	
21% K 2 LiOH.	7674	1073	1223	1110 x	1017		
	7675	1070	1213	1077	973		
Dup 7668 Green soaked strong $NiSO_4$ wash slightly dried - boil KOH.	7682	1113	1057	1043			
	7683	1117	1063	1067			
21% K	7684	1117	1077	1063			
Dup 7682	7685	1023	1210	1117	1047	Co	
21% K 2 LiOH.	7686	1003	1193	1050	910		
	7687	1000	1210	1107	957		
Green soaked $AgSO_4$ -	7691	980	1210	1043	960	Co	
21% K 2 LiOH.	7692	957	1190	1107 x	1000		
	7693	983	1200	1097	960		
Picked out green 708 float dried dense & hard - 713 genl ox	7716	967	1133	1017 x	947	Co	
21% K 2 LiOH	7717	953	1123	970	903		
	7718	970	1107	977	900		
Reg tubes fl ½ thick ox Trans 708 -	7722	1127	910	813	CO		guess flake broke up -
21% K 2 LiOH.	7723	1133	933	840			
	7724	1120	950	847			
Dup 7722 Flake twice thick of reg .0001	7725	1033	987	1000	927	Co	
	7726	1037	987	1000	953		
21% K	7727	1027	987	1013	950		
Dup 7725	7728	913	1067	967	887	Co	
21% K 2 LiOH.	7729	927	1067	970	897		
	7730	930	1063	973	883		



X [illegible] LiOH off changed it —

		Cold	50	100	150	200
Reg tubes 4 f general ox 12 mils green 708 30 mesh 21%K	7731	1100	1017	1027	1000	
	7732	1103	1037	1047	990	
	7733	1103	1060	1047	1007	
Dup 7731 21%K 2 LiOH.	7734	1050	1137	1023X	907	
	7735	1033	1157	1067	957	
	7736	1040	1110	1023	867	
Reg Tubes - 6.9 - genl ox f 24 708 - 1 21%K 5 grms K_2CO_3 2 LiOH.	7743	1023	1140	1090 X	983	907
	7744	1033	1123	1023	940	887
	7745	1027	1150	1093	1047	933
Dup 7743 5 grms K_2CO_3 - 21%K 3 grms LiOH.	7746	1020	1220	1040	933	847
	7747	1033	1213	1070	983	860
	7748	1000	1210	1040	880	[illegible]
Dup 7743 8 grms K_2CO_3 21%K 3 grms LiOH -	7749	1000	1190	1117 X	983	[illegible]
	7750	997	1160	1063	933	[illegible]
	7751	1027	1157	1103	983	887
Reg tubes 7 genl f ox Old hard green 21%K 5.15	7752	1017	960	957	917	
	7753	1033	940	930	893	
	7754	1030	990	957	930	
Dup 7752 21%K 2 LiOH.	7755	900	967	867	730	
	7756	893	953	840	720	
	7757	870	903	823	780	
Dup. 7755 21%K 2 LiOH COLD	7758	887	983	900	967	
	7759	867	928	800	840	
	7760	867	977	897	927	
Reg tubes - 4.2 f ½ ox trans - Same used 7719-22 - Ra 707 ½ the filled tubes - 21% ballflake	7761	1230	1083	1000	920	
	7762	1230	1117	1017	947	



5

		Cold	50	100	150	200		
Reg- 7 ff general ox 707 ½ w fil-low h- on hot plate 1 hour cooled + used	7767	1110	1087	1080	1050			Co
	7768	1093	1087	1097	1077			
21% K 557	7769	1093	1073	1067	1033			
Dup 7767 21% K 2 LiOH.	7770	1030	1147	1100	923	993		Co
	7771	1007	1157	1137	1023	983		
	7772	1027	1170	1113	963	960		
Dup 7767 ✓ but 708 Warmed ½ h cooled 7.4 f 24.2	7773	1110	1003	1000	950			Co
	7774	1110	1020	1033	1003			
568	7775	1103	1013	1013	993			
Dup 7773 21 K 2 LiOH.	7776	980	1143	1080	843			
	7777	977	1170	1113	867			
	7778	967	1157	1157	910			
Reg lutar. RA XXX 1 wash before filter- 7.4 genl ox 24.3	7782	1043	1000	1063	1043	1033	1050	Co
	7783	1043	1030	1077	1060	1050	1077	
631	7784	1077	1073	1123	1113	1120	1130	
Dup 7782 21 K 2 LiOH.	7785	1043	1133	1140	1067	1017	[illegible]	Co
	7786	1077	1177	1180	1133	1097	1073	
	7787	1077	1183	1167	1100	1067 3-5 x	1073	
Dup 7782 XXX Ra grim heated then cooled 7 genl ox	7788	1080	1083	1147	1130	1120 x 5-5	1103 x	Co
	7789	1083	1077	1147	1127	1087 86 x	1073 0x	
21 K — 620	7790	1060	1040	1103	1083	1070	1073	
Dup 7782 10 f gene ox 21 K.	7791	1017	1023					Co
	7792	1007	1007					
	7793	983	983					

		Cold	50	100	150	200			
Dup 7791 10 f genl ox XXX Ra not heated 21K	7794	997	987	1033	997	993	1017		Co
	7795	993	993	1047	1027	1017	980		
	7796	993	1003	1033	1017	1010	1047		
Reg tubes – 7.3 genl ox. 708 boiled H_2O 20 min no KOH. green dried in open 1 hour 21K 2 LiOH.	7800	1103	1157	960					
	7801	1087	1177	1000					
	7802	1160	1177	997					
Reg – 7.3 f genl ox green 708 boiled Conc NH4 no KOH washed dried in air 1 hour 21K 2 LiOH.	7818	990	1137	997					
	7819	1017	1153	1087					
	7820	997	1130	1017					
Reg – 7 f genl ox green 708 soaked strong NH4 NH4 Carb not washed out.	7848	1090	957						
	7849	1097	923						
	7850	1113	993						
							½V	Hot	
Reg Tubes 6.8 f ½ thick ox yellow RA 716 pigs Cobalt 64 Hypo ½ w not fil - low heat 21K 2 LiOH 6,12	7871	1070	1230	1110	943	960	1143	650	Co
	7872	1063	1230	1107	980	960	1167	533	
	7873	1080	1247	1087	950	957	1133	630	
Reg 708 soaked in K ferrate 6.9 genl f ox – 21K 2 LiOH –	7877	937	1127						Co
	7878	937	1113						
	7879	913	1100						
Dup 7871 21% KOH —	7868	1103	1097	1113	1093	1057 1103	300		Co
	7869	1113	1110	1113	1090	1063 1113	360		
	7870	1113	1073	1103	1073	1047 1087	333		
Reg Tubes – 4 No 2 ½ f – Run in 5 gms LiOH – after 2 runs found change to 21K + 2 LiOH 2 LiOH – X	7946	1046	1150	75 1157					Gr
	7947	1037	1140	1133					
	7948	1087	1177	1130					

	100	150	
A 7800	1060	923	Co
7801	1010	883	
7802	1010	867	

XXX Squareflake ½ thick

			Cold	50	100	150	200	250	250½	Hot	300	½		
Reg tubes — No 2 f ½ 4f - 24 708 in $HgCl_2$ 24 hours washed free HgCl —		7952	1140	1083	1097	1027	950	927						Co
	½	7953	1100	1043	1090	1050	973	953						
21 K.	6.60.	7954	1100	1083	1113	1063	1010	970						
Dup 7952		7955	1077	1130	917	830	857							Co
21K 2 LiOH.	½	7956	1083	1133	930	830	840							
	6.38	7957	1063	1150	963	820	850							
Dup 7952 Except green soaked strong alcohol sol $HgCl_2$ 24 hours	½	7958	1110	1080	1063	943								Co
soaked out no KOH.		7959	1130	1097	1107	953								
21%.	6.55	7960	1137	1077	1037	927								
Dup 7958		7961	1030	1207	1050	867	933							Co
21K 2 LiOH.	½	7962	1027	1193	1010	823	847							
XXX	6.51	7963	1020	1213	1027	883	863							
Reg tubes 3.9 ½ f ox 2 min soak Conc B.OH in NH_4Cl		8024	907	933	970	970	957	827	1010	347				Co
washed lots water 2 or 3 times dried, boiled 5% K washed free K		8025	860	893	923	913	900	797	927	357				
21%. square flake	6.02	8026	857	883	903	900	867	743	900	310				
Dup 8024		8027	970	1233	1177	1113					973	1113	783	Co
21%K 2 LiOH —	½	8028	987	1283	1210	1170					933	1067	720	
		8029	1007	1300	1283	1080					903	1020	657	
Dup 8024 — Except green soaked same sol		8030	883	893	890									Co
quick wash once — dried, boil K		8031	893	887	893									
3.9 ½ ox 708 24 — square f. 21%K		8032	907	937	923									
Dup 8030		8033	1017	1290	1257	1207	1117				887	933	543	Co
21K 2 LiOH. 4.2 ½ ox		8034	1017	1263	1283	1247	1117				890	1033	343	
		8035	1017	1283	1287	1207	980				787	1023	583	

Boiling green with $HgCl_2$ with H_2O or ethyl no good or fair in 21 but very bad with LiOH — Why?

Rudolf J. Simes —

		Cold	50	100	150	200	250	Reversed 250½	Tube equent Hot	Can	
Regular Bi OH NH4Cl same as used in 7619— but ½ strength soak 2 min + quick wash - dried - Foil K- 4.5 ½ ox 207 grm square f 21K	8036	1017	1017	1017	Co						
	8037	977	960	983							
	8038	983	980	1020							
Dup 8036 21K 2 LiOH.	8039	1030	1200	1133	1157	1130		Co			
	8040	1000	1200	1173	1183	1183					
	8041	1037	1217	1160	1180	1213					
Dup 8036 Except ¼ strength 4.5 ½ ox 21% K	8042	1213	1080	1087	Co						
	8043	1270	1050	1047							
	8044	1213	1057	1040							
Dup 8042 21% KOH 2 LiOH.	8045	1137	1253	1163	1113		907	1063	583		to Holland
	8046	1168	1177	1040	997		850	1000	603		
	8047	1127	1203	1123	1047		843	1017	633		
1/8 th strength Bi Sol 4.5 ½ ox - 21K	8048	1097	1017	927	Co						
	8049	1087	977	933							
	8050	1043	997	940							
Dup 8048. 21K 2 LiOH.	8051	1093	1230	1173	1117		930	1080	617	Co	
	8052	1100	1240	1143	1050		857	1063	677		
	8053	1100	1217	1130	1050		857	1063	657		
1/16 strength. 21K	8054	1123	957	943	Co						
	8055	1083	907	933							
	8056	1110	917	940							
Dup 8054 21K 2 LiOH -	8057	1047	1147	1083	933		Co				
	8058	1033	1150	1047	903						
	8059	1023	1103	1040	887						

½ thick flak

		Cold	50	100		150	200	200 Hot	250	250½	Hol
Reg tubes: 7. ox freq thick 708 – 21K 2 grms Silicate K	8060	963	1010	817	Co						
	8061	943	1027	863							
	8062	987	1033	847							
Dup 8060 21K 2 grms LiOH 2 gm Silicate K	8063	1010	1070	733	Co						
	8064	1040	1083	690							
	8065	1003	1033	623							
Dup 8060 21K 2 LiOH. 3 Silicate K	8066	990	973	567	Co						
	8067	990	947	620							
	8068	997	857	580							
Dup 8060 21K 2 LiOH 4 Silicate K	8069	940	25 827								
	8070	930	790		Co						
	8071	867	717								
Dup 8060 21K 2 LiOH. 5 Silicate K	8072	650	370								
	8073	827	517								
	8074	780	463								
Reg tubes 4½ fl ox 708 soaked Conc BiCl₃ NH₄Cl 5 min – no wash boiled KOH. washed free K – dried before KOH. 633	8075	1023	1063	1037		987	983		820	1053	303
	8076	1023	1053	1047		947	967		953	1057	~~300~~
	8077	1000	1057	1053		983	983		880	1067	333
Dup 8075 21K 2 LiOH	8078	1137	1303	1427		1247	1177		1100	1418	867
	8079	1080	1267	1377		1213	1180		1160	1410	817
	8080	1130	1333	1407		1233	1200		1160	1400	787
Dup 8075 soaked 10 min 4.3 fl ½	8081	1107	1193	1173		1153	1120 1173	253	1050	1127	253
	8082	1160	1153	1147		1160	1133 1193	310	1000	1120	310
	8083	1090	1190	1167		1127	1100 1167	293	973	1067	293

350 Run

8081	1153	1277	500
8082	1247	1364	673
8083	1213	1327	533

Co

Co

½ thick flake

Thick

to Hull

put lock on ~~hot~~ with 21K 2 LiOH

300 Run

1150	1267	447
1127	1253	473
1127	1160	323

X to be run after comes off hot in the old sol + thereafter use old sol.

		Cold	50	100	150	200	200 Hot	200 1/2	250	1/2	Hot	300	1/2	Hot	
Dup 8081 21K 2 LiOH. 6.66	8084	1230	1470	1437	1343	1240 1580	1137		1240	1483	1053	1253	1470	1137	
	8085	1227	1460	1420	1330	1313 1543	1150		1317	1583	1087	1290	1473 *	1040	
	8086	1220	1413	1400	1263	1230 1490	1120		1213	1533	1040	1240	1417	1070	
Dup 8075 Except soaked 20 mins in BiCl3 [illegible] of Conc 21%	8087	937		1150	1080	1047 1090	387		983	1063	333	Annex now put — 21 KOH 2 LiOH — + put back on hot test 300			
	8088	943		1150	1110	1060 1090	423		1007	1093	377				
	8089	943		1117	1093	1077 1097	347		1073	1127	320				
Dup 8087 21%K 2 LiOH. X	8090	1090	1333	1347	8087	350 Run 1363	1477	1137		8087 group		1243	1363	590	
	8091	1100	1357	1297	8088	1340	1460	643				1253	1400	543	
	8092	1080	1340	1307	8089	1280	1403	1087				1243	1370	850	
Dup 8075 Except soak 10 min Bi Sol - no wash - dried - soaked again 2 min - no wash then boil KOH - wash free KOH. 21K-	8093	910	1167	1147	1113	1120	503	1113	1067	1107	420	Co			
	8094	917	1160	1133	1107	1107	440	1109	997	1033	570				
	8095	930	1177	1180	1110	1050	480	1043	967	990	567				
Dup 8093 21K 2 LiOH.	8096	1087	1097	1310	1230	1130			1160	1330	857				Set aside
	8097	1087	1273	1267	1210	1193			1097	1363	830				
	8098	1060	1263	1267	1210	1180			1127	1380	737				
Reg tubes 1/2 f - 4.3 f - [illegible] green [illegible] 8038 [illegible] KOH + formaldehyd 21K 8100 has 21K 2 LiOH.	8099	1057	1127	1137	Co										given to Hollan
	8100	1093	1253	1283	1170	1113			1117	1420	953				
Reg tube [illegible] soaked KOH glycerol [illegible] 10 min no wash dried - formaldehyde - KOH [illegible] 21%K	8101	1023	1063	1057	Co										
	8102	1000	1063	1067											
	8103	987	1067	1067											
Dup 8101 21K 2 LiOH.	8104	1123	1247	1287	1170	1067			1067	1353	827				Set aside
	8105	1103	1227	1300	1173	1033			987	1320	737				
	8106	1067	1227	1327	1200	1163			1150	1400	717				

		Son 6		400					450		
8084	1210 *	1530	1067	1190	1357	1050	→	8084	977	1137	950
85	1277	1577	1110	1000	1473	1140		85	923	1273	1093
86	1217	1530	1100	1103	1380	1030		86	860	1223	777

		Cold	50.	100	150	200	Hot	250	250 ½	Hot		
Edison No 5 quicker wash has same grey black as 8101 — [illegible] with KOH sol — instead formaldehyde grey after drying	8107	990	1077	1100	1080	1060 1133		1000	1117	270	Co	New Fe after 250 Runs
	8108	1000	1070	1107	1110	1143 1147		1070	1177	310		
21%	8109	1027	1093	1130	1123	1117 3x 1173		1073	1167	310	300	
Ed Dup 8107 [illegible] HCl	8110	1117	1260	1360	1133	1000 1403	810	1013			817 1333	
21K 2 LiOH —	8111	1077	1247	1330	1218	1127 1440	850	817 —	Holland Edison got 1147 [illegible] 1353 — Fe to Holland			
	8112	1077	1247	1333	1230	1120 1303	1000	1097 —	890 when put in H2O + gave to Holland 1333			
Edison No 1 ½ c.c. of Conc HCl [illegible] [illegible] [illegible] dried formaldehyde [illegible] not black particles only reduced in little [illegible]	8113	957	1093	1197	1023 1063			960	1000	440	Co	
	8114	987	867	1197	997 1047			947	1000	477		
21% KOH.	8115	987	1107	1223	1000			1013	1010	787		
Dup 8113	8116	1123	1410	1390	1338	1053 1220	967	1133	1317	820	Set aside	
21K 2 LiOH.	8117	1073	1410	1370	1347	1243	893	1183	1343	813		
	8118	1120	1437	1320	1267	1263	1010	1210	1313	713		
No 2 Edison Dup of 8101 Except quick wash — formaldehyde full strength 21% KOH — dried all night oxydized green [illegible]	8119	1087	1263	1283	1250	1197	567	1063	1123	470	Co	
	8120	1070	1268	1260	1073	1143	520	1073	1230	483		
21 K	8121	1050	1263	1250	1110	1197	570	1063	1170	440		
Dup 8119	8122	1190	1393	1353	1270	1250	1020	1190 x	1357	853	Co	BS —
21K 2 LiOh —	8123	1193	1377	1323 xx	1290 — BS	1160	1000	1147 x	1247	840		BS —
	8124	1210	1437	1393 ?	1370 — BS "	1210	987	1177 x	1267	647		B.S —
Edison 3 — Dup 8119 Except washed 3 times quickly — formaldehyde very little KOH — washed 3 times [illegible] cold K wash [illegible] dried all night ord temp — black good —	8125	933	1200	1233	1133	1093 1093	560	1023	1063	460	Co	
	8126	937	1200	1210	1103	1133 1130	520	1050	1100	477		
21K	8127	917	1183	1197	1137	1130 1127	550	1090	1146	450		
Dup 8125	8128	1133	1400	1333	1303	* 1193	750	1200	1337	903	Set aside	split
21K 2 LiOH —	8129	1120	1410	1333.	1330	1187	1010	1160	1343	957		
	8130	1080	1307	1233	1213	1150	713	1027	1360	853		

		Cold	50	100	150	200	200 Hat	½	250	½	Flot	
[illegible] No 2 Conc BiCl NH4Cl – [illegible] soak 15 min wash twice quick throw in large quant H2O [illegible] well hot H2O dried all night [illegible] temp 21K	8131	1027	1250	1147	1177	1140	450	1147	1080	1103	513	Co
	8132	1010	1227	~~1227~~ 1247	1017	1117	510	1133	980	1183	437	
Dup 8131 21K 2 LiOH	8133	1173	1307	1347	1287	1193 1260	903		1013	1393	937	[illegible]
	8134	1190	1327	1333	1250	1260 1330	1017		990	1450	993	
Dup 8133 [illegible] Cathode against Can [illegible] then run reg 21K 2 LiOH.	8135	1150	1363	1293	1200	997 1157	817		1257	1457	1017	Co
	8136	1150	1297	1363	1180	1053 1180	780		1133	1357	683	
Edison No 6 BiCl3 NH4Cl Conc Tartrate Bi dis strong in 10% KOH. Then diluted to 5% KOH 2 quick washes reduced formaldehyde without drying dries grey black 21K.	8137	1063	1107	1100	1040	980 1103	350		883	1000	280	Co
	8138	1043	1083	1083	987	890 1060	343		853	997	317	
	8139	1100	1110	1117	1033	997 1077 350 run	277		890	1023	283	300
Dup 8137 21K 2 LiOH.	8140	1100	1067	910	8143	1017	1117	1070	Co 8143 grey			1100 1250 550
	8141	1090	1133	917	8144	1117	1253	1163				1100 1250 650
	8142	1097	1153	983	8145	1030	1117	933				993 1113 220
[illegible] No 2 [illegible] 4 oz [illegible] 708 soaked 10 min Conc BiCl3 NH4Cl sol 2 quick wash reduced on hot plate [illegible] Na wash free [illegible] 21K	8143	890	1073	1067	1000	957 1027	377		837	970	450	Put back on heat with 21K 2 LiOH
	8144	883	1030	1050	897	930 1040	383		853	1033	377	
	8145	860	1017	1000	1047	980 1023	357		953	1057	493	
Dup 8143 21K 2 LiOH.	8146	1007	1377	1243	1067	893 1040	Hat 697	Sent away for Holland's	[illegible] LiOH in [illegible]	New none put in on 200 Run [illegible] with [illegible]	250 Run	1043 – 1170 693
	8147	1013	1393	1317	1157	958 1073	860					1067 1173 763
	8148	1013	1393	1350	1217	977 1137	893					1090 1227 6[illegible]
Dup 8146 Reverse 12 hours as Cathode against Can.	8149	1043	1400	1350	1260	1080 1257			1133	1317	613	Co Holland
	8150	1013	1383	1290	1087	960 1153			1067	1227	650	
[illegible] – No 2 ½ sq ft flake [illegible] E No 9 – Bi 7 3.9 grams 23.7 21%	8154	963										
	8155	950										
	8156	963										
Dup 8154 21K 2 LiOH.	8157	1073	1267	1263	1303 BS x	1283 1500	610		1333	1460	950	[illegible] B.S
	8158	1047	1247	1250	1267	1223 1157	770		1303	1400	940	
	8159	1050	1237	1210	1177	1140 1210	747		1260*	1330	747	

* split

		Cold	50	100	150	200	200 Hot	250	250 ½	Hot	reco 7/1	
Reg tubes - 5g ½ f ox 4. Calcium No 10 70% soaked strong ammonia - heated on hot plate - then H2O washed hot.	8160	1177	1147	1190	1167	1140 1160	333	1127	1160	283	1060	put new [illegible] run cold 3 or 4 times
	8161	1180	1143	1180	1147	1113 1177	270	1097	1130	287	1030	
21K	8162	1180	1117	1153	1127	1113 1160	243	1077	1113	253	1047	
Dup 8160	8163	1067	1203	1153	1047	1067						Co
21K 2 liOH	8164	1070	1230	1153	1030	983						
	8165	1067	1227	1183	1067	993						
Reg tubes 4 5% ½ ox 5g Calcium No 11 soak 55 min Conc HCl [illegible] then plenty H2O several times [illegible] boiled [illegible] HCl left [illegible] dried all night	8166	1007	1220	1150	1140		330	1037	1073	487		Co
	8167	983	1153	1117*	×1107 BB		460	1043	1070	503	B-B	
21K	8168	990	1210	1190	1150		433	983	1037	493		
Dup 8166	8169	1137	1243	1317	×1250 BS			1260 ×	1347	1013	B-S	Set aside
21K 2 liOH -	8170	1139	1307*	1313 *	×1263 SB			1357 ×	1457	1070	B-B	
	8171	1130	1237*	1247*	×1163 S S on S			1180 ×	1380	720	S+S on S	
Reg tubes 24 Ra 718 then 20 CP Soda used for precipita. 4 g ½ ox green more bulky than 708 ½ w not filtered dried low heat.	8172	1217	1177	1183	1193	1173 1207	327	1167	1200			Why not some ½ w filtered, low heat [illegible] variations
	8173	1227	1193	1197	1217	1193 1217	297	1177	1177			Co
21K 6.09	8174	1200	1153	1173	1157	1150 1167	253	1147	1170			
Dup 8172	8175	1147	1243	1187	1113	1047 1243						Co
21K 2 liOH -	8176	1170	1267	1193	1083	1010 1220						
	8177	1143	1270	1193	1067	1000 1217						
Reg tubes - 3.9 ½ ox sq - 24.2 Mass action green used in 6079 -	8178	1187	1153	1183	1193	1180 1200	263	1187	1207			Co B.S.
	8179	1202	1167	1187	1217	1233 1260	347	1213	1247			
21K 6.47	8180	1170	1107	1097	1127	1117 1140	230	1097*	1130			
Dup 8178	8181	1217	1303	1267	1200	1147		1133	1267	633		Co
21K 2 liOH.	8182	1200	1287	1317	1223	1183		1110	1253	620		
	8183	1200	1300	1283*	1200	1120×		1093	1230	627		

		Cold	50	100	150	200	200 Hot	250	250½	Hot	
Replates No 2 ½ ox sqr RA 707 – no wash – filtered – (no heat) Requires new plated rings –	8184	1200	1170	1197	1200	1183 X 1197	253	1180	1193	290	Co
	8185	1207	1200	1220	1223	1213 1230	217	1213	1240	260	
21K 6.22	8186	1167	1177	1190	1183	1197 1213	227	1187	1210	293	
Dup 8184	8187	1193	1267	1277	1130*	1123 X		1047 X	1197	573	Co
21K 2 LiOH.	8188	1190	1313	1330	1180	1123		1017	1257	587	
	8189	1197	1300	1297	1133	1093 X		973 X	1170	633	
Replates No 2 ½ sqr ox – E No 12 boiled long while KOH, washed out – in bulky – 100cc H_2O with 20 grm $NiCl_2$ dried no KOH.	8190	1130	1063	1090	1093	1080 1103	283	1067	1090	300	Co
	8191	1173	1103	1097	1110	1100 1130	273	1067	1090	260	
21K	8192	1183	1137	1180	1163	1150 1167	307	1123	1150	293	
Dup 8190	8193	1043	1170	1120	990 *		Co				
21K 2 LiOH.	8194	1093	1223	1137	1060						
	8195	1040	1177	1133	947						
Dup 8190 – but Edison 13 green soaked Conc KCl. left in dried – then made in Tubes KCl soaked out	8196	1097	1047	1083	1043	Co					
	8197	1057	1023	1057	1053						
21K	8198	1080	1023	1057	1043						
Dup 8196	8199	970	1133	1080	Co						
21K 2 LiOH –	8200	977	1130	1080							
	8201	997	1133	1033							
Special pure nickel tubes, ni wire grids shut – ni rings – 23.9 708 3.9 ½ ox sqr –	8220	1223	1160	1180	1127	1080 1123	273	1063	1097	290	Co
	8221	1217	1140	1173	1123	1083 1133	280	1080	1123	303	
21K 6.04	8222	1226	1147	1157	1113	1093 1140	280	1080	1117	280	
Dup 8220	8223	1117	1263	1170	940	957 1193		903	1080	597	Co
21K 2 LiOH.	8224	1117	1263	1170	940	963 1173		897	1087	600	
	8225	1110	1260	1180	920	920 1157		893	1067	547	

Something wrong here; ran out as 150 — 150 is higher than 200

8229 - Hooper looking see how they run. Chg hot dis cold + twice as run

X

		Cold	50	100	150	200	200 Hot	250	1/2	Hot	300	1/2	Hot
Dup 8220 CP Nickel grid tubes 25% K 2 LiOH.	8226	1283	1360	1237	847 1197	893 1123	503						
	8227	1260	1353	1243	907 1267	907 1213	507						
	8228	1283	1353	1153	783 1243	789 1097	447		Co				
Dup 8220 CP Ni grid tubes 27% K 2 LiOH. were marked 3 but mistake made always had 2.	8229	1370	1433	1383	853 1100	833 1067	613						
	8230	1360	1433	1333	930 1277	860 1190	673				*		
	8231	1367	1433	1353	917 1267	860 1193	660						
Reg tubes. 1½ 3½ 237 No 2 ox ½ 3.9 — Edison 17 Carb Strontia precip in pores 708 21K	8232	1237	1177	1200	1187	1153 1177	340	1157	1187	243	1150	1173	367
	8233	1223	1167	1197	1170	1153 1177	320	1133	1163	303	1110	1143	390 Co
	8234	1227	1183	1193	1183	1177 1203	297	1163	1197	343	1140	1167	433
Dup 8232 21K 2 LiOH.	8235	1107	1223	1200	990	993 1163	507						
	8236	1117	1230	1213	973	967 1200	543	Co					
	8237	1107	1197	1147	950	953 1190	543						
Dup 8232 Except Edison 16 — Ba Carb precip in pores — 21K	8238	1210	1130	1170	1143	1117 1140	387	1113	1133	380	1090	1113	433
	8239	1197	1123	1147	1113	1083 1117	377	1057	1100	343	1060	1093	423 Co
	8240	1213	1143	1167	1143	1127 1153	363	1097	1130	373	1097	1127	410
Dup 8238 21K 2 LiOH.	8241	1080	1210	1147	1037	1000 1197	627						
	8242	1060	1207	1140	1037	997 1170	630	Co					
	8243	1053	1200	1143	1040	1000 1193	683						
Dup 8232 E 15 grams soaked 100cc 20 grms Nickel SO4 6 hours 1 quick wash dried — made into tubes then boiled KOH. dried after boil + put right into 21% KOH.	8244	1140	1087	1130	1117	1083 1120	277						
	8245	1140	1087	1140	1130	1107 1133	300	Co					
	8246	1147	1093	1123	1077	1063 1093	260						
Dup 8244 21K 2 LiOH.	8247	1027	1233	1150	1013	833	553						
	8248	1007	1197	1080	923	773	557	Co					
	8249	1050	1233	1140	993	890	567						

		Cold	50	100	150	200	200 Hot	250	1/2	Hot	
Reg Tubes oxidized just little Rested LiOH 1/2 ox sqr 21K	8256	1210	1083	1130	1100	1063 1100	247	1050	1073	253	Co
	8257	1217	1107	1117	1110	1083 1113	240	1067	1100	233	
	8258	1210	1080	1097	1077	1043 1060	270	1040	1067	247	
Dup 8256 21K 2 LiOH.	8259	1130	1197	1143	917	933 1193	533				Co
	8260	11.20	1210	1130	890	957 1177	517				
	8261	1117	1213	1140	943	977 1197	530				
Dup 8256 Except tubes ox more peacock- 3.9 1/2 f sqr 708— 21K	8262	1193	1083	1083	1067	1063 1077	267	1063	1080	220	Co
	8263	1207	1057	1100	1057	1013 1030	243	1030	1050	230	
	8264	1210	1097	1117	1067	1077 1097	267	1083	1113	210	
Dup 8262 21K 2 LiOH—	8265	1113	1230	1177	1000	1020					Co
	8266	1127	1220	1133	977	1003					
	8267	1103	1207	1177	933	970					
Tubes oxidized black & higher shows matte— 3.9 1/2 23.9 708 21K	8268	1023	643	Co							
	8269	1080	647								
	8270	1097	757								
Dup 8268 21K 2 LiOH—	8271	1100	1097								
	8272	1100	1053								
	8273	1110	1097								
Reg tubes 1/2 ox sqr E 18 soaked 21K with 5 gm Iodide K— then washed out— 21K 2 LiOH—	8277	1067	1207	Co							
	8278	1087	1220								
	8279	1050	1210								
Reg tube 1/2 ox sqr E 19— soaked alone HgCl washed out— no KOH. 21K	8280	1230	1133	1133	1057						Co
	8281	1223	1150	1110	1083						
	8282	1223	1107	1140	1057						
Dup 8280 21K 2 LiOH—	8283	1127	1220	1117	820	900					C
	8284	1120	1217	1117	853	860					
	8285	1107	1230	1103	863	867					

3/3354
1118

1118
851
267

1225
1066
159

3/3197
1066

3/2556
851

See also 7953 & 7961— HgCl same big Loss [illegible] after Soaking with LiOH

		Cold	50	100	150	200	200½	Hot	250	250½	Hot	300	Hot 200 Rm	
Dup 8280 Edison 20. Ethyl sat HgCl$_2$ washout Ethyl afterward H20 21K 6,43	8286	1097	883	Co										
	8287	1113	943											
	8288	1113	897											
Dup 8286- 21K 2 LiOH,	8289	997												
	8290	987												
	8291	1007												
Reg tubes. Edison 21 green soaked 3 gms aluminum washed out dried— 21K 5.98	8292	1047	1113	1107		Co								
	8293	1077	1117	1100										
	8294	1053	1113	1083										
Reg tubes, 1/2 ox sqr Edison 22. Soak Conc Ni(OH)$_2$ in NH4 NH4Cl- dried then boil KOH. washed well 6.03 21K	8295	1180	1120	1120	1077	1013		Co						
	8296	1180	1137	1167	1127	1087								
	8297	1183	1153	1190	1163	1110								
Dup 8295 21K 2 LiOH,	8298	1073	1367	1133	1053	973	1210	517	Co					
	8299	1060	1350	1133	1017	967	1190	487						
	8300	1057	1347	1133	1110	953	1200	513						
Reg tubes 1/2 ox sq.-RA 719 [illegible] dup of 1/27 1/2 wash filtered - low heat - drained in [illegible] 2 hours - 24 gr- 21K 6,52	8301	1200	1087	1040	1090	1070		250	1037	1083	243	990	1002	277
	8302	1183	1053	1047	1077	1063		273	*1033	1067	280	977	993	377
	8303	1197	1037	967	997	1047		280	1027	1063	257	973	993	433
Dup 8301 21K 2 LiOH,	8304	1163	1317	1173	1097	1000	1227	513	913	1110	540	Co		
	8305	1167	1333	1240	1163	1050	1277	557	933	1153	567			
	8306	1163	1323	1147	1090	977	1220	570	927	1110	580			
Dup 8301 Except drained 3 hours 21K	8307	1183	1037	1040	1067	1087		283	1073	1083	283	Co	[illegible]	
	8308	1177	1047	1043	1057	1087		310	1063	1067	290			
	8309	1183	1083	1080	1070	1103		253	1103	1113	277		253	

		Cold	50	100	150	200	200½	Hot	250	250½	Hot	B-S VBS 1 Rung	Hot 200 Run S
Dup 8307 21K 2 LiOEt.	8310	1133	1317	1253	1173	1133 X	1293	507	1060 X	1233	507		
	8311	1130	1200	1053*	BS IR 977*	843 X	987	520	947 X	887	520		B.B.S 1 Rung
	8312	1153	1325	1253	1163	1037	1247	560	947	1127	560	Co	
Dup 8301 Except 719 drained 10 hours 21K	8313	1137	1043	1030	1063	1073		247	1027	1040	277		
	8314	1163	1047	1043	993	1033		267	950	967	233	Co	
	8315	1147	1080	1110	1117	1143		280	1093	1113	253		
Dup 8313 21K 2 LiOEt.	8316	1103	1277	1147	1083	1027	1213	507	1060	1193	353		
	8317	1113	1250	1133	1087	1017	1190	507	947	1117	533	Co	
	8318	1100	1243	1133	1107	1010	1193	590	950	1157	553		
Dup 8301 Except 719 Drained 24 hours 21K	8319	1177	1080	1093	1090	1107		227	1063	1077	213		
	8320	1150	1030	1047	1057	1103		217	1063	1080	220	Co	
	8321	1163	1060	1070	1083	1103		213	1030	1050	240		
Dup 8319 21K 2 LiOEt.	8322	1170	1320	1213	1380 SS 1180 X	1067	1283	530	1043	1197	520		
	8323	1183	1333	1193	1110 * IR	970	1140	557	850 X	1023	550	VBS IR	
	8324	1180	1333	1253	SS 1170 X	1100	1300	483	987 X	1167	503	B-S Co	
Edison 24 719 RA – 2 hour drain Soak Conc BiCl3 NH4Cl 10 min. 719 washed–dried–heated 21K 1st then boiled 5K washed nearly free Cl 4 1/2 ox op. 24 green – 21K .655	8331	1043	1233	1177	1177	1090	1140	390	1027 ✓	1170	400		
	8332	1027	1213	1163	1137	1143	1183	423	1090	1210	453	Co	
	8333	1027	1133	1133	1163	1090	1157	450	1040	1167	417		
Dup 8331 21K 2 LiOEt.	8334	1150	1383	1340	917 1433								
	8335	1160	1390	1417	1193 1447	Cu							
	8336	1107	1390	1417	1160 1433								
25 Edison same as E 24 Except washed twice quickly Conc NH4Cl – dried then KOH soln. treated 4.2 1/2 fox 23.9 green 719 RA 2 hour drain – 21K S 7.2	8337	1163	1280		1100	1067	1160	383					
	8338	1127	1280		1133	1060	1150	420	Co				
	8339	1173	1313		1090	990	990	370					

		Cold	50	100	150	150½	Hot	200	200½	Hot				
Dup 8337 21K 2 LiOH.	8340	1200	1447	1423	1280	1497x	1090	1173	1340	873				Set aside
	8341	1260	1447	1457	1357x	1567x	1120	1260	1400	963				
	8342	1267	1447	1413	1288x	1427x	1123	1200	1297	1017				
Edison 28 ½ strength Conc $BiCl_3$ NH_4Cl 708 Reg manipulated same as E 27 4.2 ½ f ox 24 grain 21K.	8343	937	1017	1043	1040	1088	300	1023	1083	380				CO
	8344	937	1013	1040	1013	1053	260	987	1033	293				
	8345	923	997	1000	987	1046	260	930	1017	300	250			
Dup 8343 21K 2 LiOH.	8346	1110	1407	1343	1307	1447	973	1253	1353	870	1087	1280	1113	Set Both
	8347	1107	1410	1350	1240	1467	1040	1203	1377	897	1030	1280	1083	
	8348	1077	1397	1243	1190	1467	960	1043	1323	943	993	1283	1090	
Edison 29 - 719 RA 2 hours - 10 min soak ½ strength Conc $BiCl_3$ NH_4Cl - 2 quick washes with Conc NH_4Cl - dried, then all night 10% K Gold - in morning boiled wash nearly clean Cl - dried - float yellow 21K 6.41	8349	1047	1127	1113	1100	1127	273	1020	1040	313				CO
	8350	1017	1117	1123	1113	1153	273	1087	1120	313				
	8351	1040	1130	1150	1133	1177	273	1123	1157	363				
Dup 8349 21K 2 LiOH. 2.26	8352	1163	1460	1383	1320	1527	1030	1290	1417	907	1123	1400	1063	Set aside
	8353	1143	1447	1230	1263	1467	600	1190	1420	943	767	1467	1100	
	8354	1170	1443	1297	1133	1550	1047	1047	1433	1043	837	1493.	1187	
Edison 27 - 719 RA 2 hours soak ½ strength Conc $BiCl_3$ NH_4Cl - 10 mins same as used E 24 & 25 - dried - boiled KOH 10% washed out K - float yellow. 4 x 02 ½ oxf 24 grain 21K.	8355	1057	1133	1117	1130	1177	233	1067	1093	287				CO
	8356	1057	1133	1163	1153	1187	233	1083	1117	280				
	8357	1030	1127	1133	1153	1200	270	1097	1187	303				
Dup 8355 21K 2 LiCl -	8358	1143	1333	1340	967 1360x		830							Set aside
	8359	1147	1350	1217	867 1433		923	800	1500	737				
	8360	1170	1383	1367	1020 1443		773	1117	1417	1090				
Edison 31 708 rather Conc BaCl 20 mins soak - dried - then soak Conc $MgSO_4$ - 2 hours washed out then heated 5% KOH - wash out 21K.	8361	1143	1093	1100	1095	1127	353							CO
	8362	1150	1103	1117	1100	1123	337							
	8363	1160	1093	1093	1083	1113	333							

3/3230
1077

1263 on
209th Run

12

3/3716
1239

3/3527
1176

		Cold	50	100		150	150½	Hot	
Dup 8361	8364	1033	1073				Cd		
21 K 2 LiOH.	8365	1030	1100						
	8366	1023	1077						
Edwin 30 Dup Edwin 29 but 708 green-boiled KOH. floc not yellow	8367	923	990	987		933	1000	266	Co
	8368	927	1017	993		977	1040	273	11
21 K	8369	923	1000	1027		1053	1087	277	300 cold 100 Hot
Dup 8367	8370	1063	1350			Since 50 has now 160 Cold runs —	200 1223	½ 1287	990
21 K 2 LiOH.	8371	1077	1387				1223	1273	1023 Cd
	8372	1033	1320				1153	1207	900
Edwin 32 Conc BaCl2 708 soak 1½ hour dried — soak NaSO4 — swelled but went clear [illegible] no KOH. 42 ½ g [illegible] sqr.	8373	1230	25 1197	1160		Co [illegible] as 50 Run —			
	8374	1227	1193	1160					
21 K	8375	1233	1193	1173					
Dup 8373	8376	1131	1157	Co					
21 K 2 LiOH.	8377	1140	1177						
	8378	1130	1157						
Edwin 33 (Tubes) soaked Conc BiCl3 [illegible] 10 min dried - put — 21K 15 min then boil — 5% K ½ [illegible]	8379	1083	1383	1787		990 1317		637	Set aside —
21% K 2 LiOH	8380	1010	1300	1200		1090 1327		687	
	8381	1023	1323	1143	102	1067 1330		607	
Dup 8379	8382	1130	25 1333	1380	1110 1453	947	1127	673	Co
21 K 2 LiOH. Not heated soaked 10 min heated 5 min 140 [illegible] much metal deposited	8383	1057	1253	1330	1157 1360	980	1133	713	5 ms
	8384								
Edwin 35 Anthracene	8385	1080	25 1023	Co					
45% & 24.4 [illegible]	8386	1100	1040						
21%	8387	1090	1040						

		Cold	50	100	150	200	200½	Hot
Dup 8385	8388	1093	25 1150	Co				
21K 2 LiOH —	8389	1100	1133					
	8390	1107	1133					
Edison 36 —	8391	1167	1113	1123	1123 1133			
Double soak BaCl — NaSO4	8392	1190	1137	1167	1177 1183			
21K 719	8393	1180	1113	1113	1110 1123			
Dup 8391	8394	1063	1177	1173	1083 1197	1027	1160	437
21K 2 LiOH.	8395	1073	1187	1173	1083 1213	1000	1097	483
	8396	1077	1177	1173	1063 1170	1007	1100	470
Edison 40 soak Conc UrNO3 dried then soak KOH. 4.2 ½ flax sqr	8397	1057	1043		Co			
	8398	1073	990					
21K	8399	1073	1060					
Dup 8397	8400	1020	1200	1117	Co			
21K 2 LiOH.	8401	1040	1203	1133				
	8402	1037	1200	960				
Edison 37 — BaCl K SO4	8403	1203	1163	1167	1143	1153	1173	487
2 dips ½ of 4.5 24.1 grm	8404	1217	1173	1167	1143	1120	1187	367
21K white green 719	8405	1210	1160	1147	1120	1127	1163	357
Dup 8403	8406	1113	1267	960	Co			
21K 2 LiOH.	8407	1117	1217	1193				
	8408	1130	1257	1150	100			
Edison 43 BaCl Chromate K	8409	1213	25 1210	50 1227	1220 after dry 72			
1 soak 4.2 ½ flax sqr	8410	1197	1210	1227	1000			
21K 419 2 hours	8411	1223	1230	1237	557			

Co

Confirming this. Co

Trans go bad from Chromium

8412 after forming only full cap at 8th run [illegible]
5th run only 500 —

		Cold	50	100	100 acd run	
Dup 8409 21 K 2 LiOH —	8412	1133	1340	1167	247	Cd. Chromium hurts the irons
	8413	1147	1330	1217	240	
	8414	1147	1353	1150	303	
Edison 39 - KWO_3 - $BaCl_2$ [illegible] 4.5 ½ f ox 21 K	8415	837				
	8416	860				
	8417	820				
Dup 8415 21 K 2 LiOH.	8418	667				
	8419	697				
	8420	1027				
Edison 41 Conc Nickel Chloride 719 Ka soak 1 quick wash - did it twice - breaks up — 21 K	8421	917	1040	1013		Co
	8422	913	1047	1013		
	8423	830	943	957		
Dup 8421 21 K 2 LiOH.	8424	1027	1230	1120		CO
	8425	1010	1227	1180		
	8426	1007	1200	1150		
Edison 38 Ra 719 Orthophos Pot - $BaCl_2$ 1 soak Cont wash [illegible] 4.5 f ½ 23.7 21 K	8427	1023	25 970			
	8428	1050	990			
	8429	1057	983			
Dup 8427 21 K 2 LiOH.	8430	920	25 513			Co
	8431	890	467			
	8432	897				
Edison 43 K Molybd - $BaCl_2$. 1 soak 719 Ra 4.12 ½ f ox 24.2 21 K.	8433	640				
	8434	593				
	8435	593				

Note bad effect of phos on lithia

8

8436
37

			50	100	150	Hof	200	200½	Hof	250	½	Hof	
Dup 8433 21K 2 LiOH.	8436	943											
	8437	913											
	8438	917											
Edison 44 SrCl – K SO4 1 soak ½ ox – 44 238 719 21K	8439	1210	1240	1237	1220 1247	350	1177	1227	350	1100 ×	1153	533	Co
	8440	1207	1233	1243	1223 1140	353	1190	1227	353	1133	1173	527	5
	8441	1217	1240	1223	1233 1248	357	1217	1240	357	1160	1197	490	
Dup 8439 21K 2 LiOH –	8442	1127	1330	1193	1033 1290	623	To Holland						
	8443	1130	1333	1147	987 1250	643							
	8444	1133	1367	1193	997 1260	607							
Edison 45 Conc Na Stannate – BaCl 1 soak. No 2 [illegible] ½ ox 42 239 green 719 21K	8445	1273	1210	1150	Co								
	8446	1277	1207	1173									
	8447	1290	1163	1120									
Dup 8445 21K 2 LiOH —	8448	1147	1207	860	787	Co							
	8449	1150	1277	1053	910								
	8450	1133	1297	1113	943								
Edison Conc K Antimoniate – BaCl – 1 soak 719 21K	8451	767	843	Co									
	8452	770	847										
	8453	760	840										
Dup 8451 21K 2 LiOH –	8454	727	1180	1130	1030 1217		990	1163	717	Co			
	8455	740	1117	1110	1043 1193		1043	1147	667				
	8456	767	1157	1123	1000 1140		1000	1117	687				
Regular 44 ½ ox f 24.4 grn 719 3 or 4 grams Bismuth hydroxide in cell 21K 2 grams LiOH –	8457	1177	977	1163	1133 1343	670	To Holland			150 1043	½ v 1297	150 R[illegible] new 7e	
	8458	1173	1267	1127	1093 1303	640			11	1120	1333	1287	
	8459	1173	1180	1167	1132 1297	687				800	1133		
	8457	200 1013	1263	493									
	58	977	1153	503									
	09	1200	1314	540									

[illegible] 664 no Bi

8481 = First use of No3 flake where Zinc + H2SO4 is ~~used~~ – CuSO4 – 2 bottles CrO3 2 bottles KOH, sticky, glycerine phos – all purification – it acts Gellar – here after all done

			25 ~~25~~	50	100 wheat used	150	150 Hot	200	200½	Hot	250	back ½	Hot	
used 8081- 17½ K 2 Loth.	8460		1350	1300	1133	917 1166	960							
	8461		1380	1277	1067	873 1067	950							Give to Holland
	8462		1370	1277	1050	813 1030	917							To Reverse + get back
719 KA 2 hours used with Reg ½ f. 4 f 247 flake treated five drops HCl washed dried 21K	8463	1248	[illegible]	1130	1123	1040		1010	1083	323	950	1900	247	Cd
	8464	1220	[illegible]	1130	1173	1133		1083	1147	330	1033	1073	270	
Dup 8463 21K 2 Loth	8465	1210												
Dup 8463 – 21K 2 Loth ?	8466	1197	1337	1343	1147	960 1200	613	963	1130	610				Cd
	~~8467~~													
	~~846~~													
Reg tubes 1½ 3½ 237 ½ f treated 10 grammes of flake with 8 drops Conc HNO3 washed – 100 cc H2O 719 2 hours 21K	8469	1227	1200	1160	1170	1063 1110	293	1017	1073	267				Zn Hydrops
	8470	1210	1173	1117	1133	1053 1067	167	970	1003	220				
	8471	1200	1160	1127	1133	1050 1093	200	1017	1060	243				Cd
Dup 8469 21K 2 Loth.	8472	1220	1347	1340	1100	887 1130	590							
	8473	1210	1367	1387	1133	933 1140	623	913	1063	613				Split Cd
	8474	1220	1333	1337	1130	867 1090	557	850	1067	507				
Dup 8469 Except f. treated 8 Drops HCl 100 cc H2O – 719 2 hours 21K	8475	1187	1123	1090	1090	1000 1050	200	943	990	237				
	8476	1183	1150	1127	1117	1063 1110	230	967*	1047	287				S on S Cd
	8477	1200	1193	1177	1193	1087 1137	270	1037	1153	297				
Dup 8475 21K 2 Loth.	8478	1260	1323	1317	1033	813	583	867*	1057	470				BS IR
	8479	1197	1280	1290	1103	917	610	977x	1167	533				S Cd
	8480	1207	1323	1330	1067	933	610	897	1103	523				S on S
Reg tubes – 50 gr f of black ground beyond Perik – Zinc Hydrops 719 KA 4.2 f 24.3 gr – 21K	8481	1217	1170	1157	1157	1177 1197	233	1170	1190	313				Cd
	8482	1220	1137	1133	1170	1163 1177	250	1113*	1143	303				
	8483	1207	1137	1133	1180	1177 1153	257	1140	1153	267				

Note next page.

			25	50	100	150	150 ½	Hot	200	½	Hot	
Dup 8481 21K 2 Loff. –	8484	1200	1267	1270	1210	1037	1243	660	1047	1200	607	Co
	8485	1207	1257	1260	1240	1100	1270	670	1110	1283	597	
	8486	1200	1267	1273	1210	1063	1250	607	1167	1267	547	
Dup 8481 Except tube stock welded in Zinc Hydrogen 719 2 h 21K	8487	1157	1150	1133	1150	1147 ✱	1160 x	250	1067 x	1107	270	B-S-1 Ring
	8488	1153	1167	1060	1043	1047	1060 x	200	1000 x	1010	200	5 Son S
	8489	—										Co
Dup 8487 21K 2 Loff.	8490	1183	1293	1273	*1150^{BS}	917	1170	647	933 x	1113	430	Co B.S.
	8491	1167	1287	1257	1180	990	1210	633	1027	1170	693	
	8492	—										
Reg tubes [illegible] ½ Zinc [illegible] 719 KA [illegible] HNO$_3$ [illegible] 21K	8493	1200	1150	1143	1170	1133	1153	220	1113	1133	210	Co
	8494	1217	1150	1143*	1163	1140	1170	223	1117	1140	207	
	8495	1200	1110	1080	1097	1087	1100	210	1037	1050	210	
Dup 8493 21K 2 Loff.	8496	1200	1257	1257	1180	867	1240	607	1037	1233	553	Co
	8497	1193	1277	1290	1220	1050	1280	603	1053	1217	617	
	8498	1213	1277	1285	1193	867	1283	643	987 x	1150	540	Sons
Dup 8493 But same amount [illegible] Hydrogen HNO$_3$ Conc 719 2 hours 21	8499	1217	1157	1133	1120	1053	1080	213	1043	1097	183	Co
	8500	1200	1150	1147	1150	1093	1140	227	1067	1120	260	
	8501	1206	1157	1150	1177	1110	1163	257	1067	1120	267	
Dup 8499 21K 2 Loff.	8502	1190	1273	1297	1200				1017	1147	513	Co
	8503	1193	1300	1327	1093				883 x	993	543	S/1 Ring
	8504	1183	1257	1313	1157				1023	1193	493	
Reg Tubes 4 New type of ½ thick No 3 — KA 720 [illegible] Hydgn ½ in filled, low heat [illegible] 20 [illegible] 4.4 24.2 21K	8505	1180	1170	1157	1183	1177	1197	253	1157	1177	287	Co
	8506	1173	1160	1153	1187	1183	1200	267	1167	1183	280	
	8507											
Dup 8505 21K 2 Loff.	8508	1173	1333	1350	1277	1067	1303	613	998	1283	520	Put new irons in —
	8509	1187	1343	1373	1263	997	1303	593	1013	1260	503	April 26th — 150 Run
	8510											given to [illegible]

Newflake but that curled on ox breakdown not ... only 5% Peacock — ZnH — bulky

Scam split little -

Dup 4 that used Hyg to do quality tests

Set aside — be sure & investigate these tried new Fs & changes of Sol but no use — soaked in 2/1 hot 2 weeks then run in 21K 2 Li did it no good CO

			25	50	100	150	150 1/2	Hot	200	1/2	Hot	
Dup 8505 27% KOH 6 gm LiOH.	8511	1297	1230	643								
	8512	1330	1267	683 x								
	8513	1280	1210	563								
Reg tubes RA 721% w filled dried low heat, filled in fillers pieces looks like 706 & not like 707 4.4% of ZnH Newflake bulky 21K 677	8514	1233	1213	1157*	6 ms 1117 x	1057 x			950 x	1020	263	B-S 1 Ring
	8515	1243	1227	1190	85 ms 1177 x	1150 x			1027	1093	260	CO
	8516	1240	1213	1167	1193	1163			1080 X	1110	257	S 1 Ring
Dup 8514 21K 2 LiOH —	8517	1200	1330	1343	990	1000	1267	487				
	8518	1180	1333	1373	1200	1067 xs	1267	460				
	8519	1177	1317	1213.	BS 1R 1030 *	773	947	393				
Tubes stock welded in ZnHyd 4% of % ex peacock — 719 RA 2 hed.. 21K	8520	1213	1167	1103	1000	963			900	977	290	Note Tubes welded ZnH — low capacity
	8521	1207	1133	1090	1023	957			930	977	260	
	8522	1226	1140	1090	1010	957			887	930	150	CO
Dup 8520 21K 2 LiOH.	8523	1163	1293	1160	933	847	967	493	793	883	467	Co
	8524	1163	1307	1183	943	853	950	483	793	860	487	
	8525	1133	1277	1043	857	743	840	497	717 X	993	450	s
Dup 8520 but use 4 flake which has not been dodged but which built up in ZnH	8526	Flake too flat wouldn't fit										
	8527											
	8528											
Dup 8520 Tube stock welded ZnHy 720 RA used 4.4% peacock 24.3 21K	8532	1230	1197	1133	1107	1070	1107	310	1060	1080	253	Co
	8533	1200	1133	1093	1127	1063	1070	323	1027	1080	263	
	8534	1247	1167	1137	1083	1047	1113	313	1000	1070	243	
Dup 8532 21K 2 LiOH.	8535	1177	1303	1213	763	877		437	813	910	457	Co
	8536	1177	1303	1260	943	957 903		490	843	940	467	SEE about these
	8537	1180	1293	1260	1083	1030 893 1030		490	833	977	467	8508 is dup 720 of views 1303 on 1/2

8548 bottom slightly split —

		Cold	25	50	100	150	150 Hot	200	½	Hot	
Dup 8520 - but use 721 Ra filtered in filter press - Tube clock Washed ZnH. f ½ pancock reduced ZnH — 4.4 24 21K	8538	1207	1123	1067*	5 ms 1013 x	920 970 x	340	837	893	257	Co
	8539	1183	1127	1127	1160	1143 1170	337	1103	1143	253	
	8540	1190	1160	1133	1173	1187 1210	347	1140	1183	253	
Dup 8538 21K 2 [illegible]	8541	1200	1317	1333	733	987 1207	500	910	1047	487	B S
	8542	1213	1330	1317	1240 5 m	1000 1207	413	893 x	~~1010~~	~~453~~	B S
	8543	1223	1330	1353	1240	1053 1260	550	980	1137	497	Co
Dup of 8337 Reg Tubes 4.4 f 24 g. 21K	8544	987	1147	1083	917	Co					
	8545	983	1153	1097	933						
	8546	993	1083	1020	880						
Reg tubes No3 ½ pancock 721 Ra washed by Decantation. ½ w filtered, Lobo ht. wt. ZnH f - bag filter - 21K 6.47	8547	1260	1223	1190	1200	1210	243	1153	1187	253	Co
	8548	1273	1220	1193*	1203	1187	270	1067	1160	267	
	8549	1267	1223	1213	1213	1197	270	1103	1167	280	
Dup 8547 21K 2 [illegible]	8550	1223	1340	1307	733	977 1200 *	547	893 x	1010	467	BS Co B-S.
	8551	1247	1333	1357	1267	1043 1293	573	970	1140	497	
	8552	1240	1333	1383	1240	1130 1270	660	1010	1180	537	
Reg tubes Ra 721 ½ w filtered dried Lobo heat. No3 flake ZnH. 4.4 — Washed by percolation. Uslight catch. tube 705 21K. 6.35	8553	1275	1217	1217	1193	Co					
	8554	1290	1223	1173*	1047						
	8555	1283	1200	1183	1200						
Dup 8533 21K 2 [illegible], 2.7	8556	1213	1333	1397	1257	1067 1247	567	to Holland to test tubes			
	8557	1230	1347	1373	1300	1083 1287	560				
	8558	1223	1347	1373	1283	1093 1273	523				
Same green as 8553 721 Ra - but washed by Decantation - its green tube 701 4.4 No3 ½ pancock ½ w filter bag Note Low cut — 21K 5.67	8559	1123	1110	1053	1057	Co					
	8560	1117	1093	1027	1013						
	8561	1123	1107	1053	1037						

B S

Sons 2 Rings

All ~~[illegible]~~ Zinc Hydrogen

			25	50	100	150	150 ½	Hot	200	½	Hot	
Dup 8559 21 K 2 LiOH	8562	1040	1160	1097	950	680 797		480		Co		
	8563	1023	1137	1087	933	620 727		493				
	8564	1023	1167	1133	1033	690		520				
721 RA · filter press ½ w. filter, low heat wash decantation soaked 10 mins Conc [illegible] washed [illegible] dried [illegible] 18% KOH, washed — 4.4 f ½ ZnH · 27 g	8565	890	1117	1047	1023	Co						Co
	8566	[illegible]	1033	1060	833							
	8567	863	1133	1057	1067							
Dup 8565 21 K 2 LiOH	8568	863	1280	1250	1093	903	1183	977	1077	1127	883	April 27 put in new crown put new nickels watch new long tube 150 Run
	[illegible]	867	1327	1287	1133	1033	1167	970	1063	1113	860	
	[illegible]	867	1260	1243 75	1107	963	1113	920	1067	1110	857	
Dup 8565 27% K 2 LiOH	8571	767	1150	930		673 X	723	667		Co		
	8572	763	1183	967 *		640 X	723	693				
	8573	753	1183	840		677	843	740				
721 RA ½ w not filtered, low heat washed decantation — 4.2 ½ f ZnH.	8574	[illegible]	1173	1160	1177	1140	1160	307	1120	1140	203	Cg
	8575	[illegible]	1233	1180	1183	1127	1140	307	1087	1103	240	
	[illegible]	1300	1263	1230	1247	1173	1207	357	1117	1140	327	
Dup 8574 21 K 2 LiOH	[illegible]	1223	1310	1100	Co	quits E to [illegible]	going to change [illegible] if no better [illegible] tubes split 2k					
	[illegible]	[illegible]	1327	1117 X								
	[illegible]	1230	1240	840 X								
1062 RA [illegible] 4.4 ½ f ZnH.	[illegible]	[illegible]	1220	1160	1133	1090	1127	367	Co			
	8581	1220	1177	1167	1180	1090	1143	313				
	8582	1250	1207	1193	1197	1143	1170	353				
Dup 8580 21 K 2 LiOH	[illegible]		1290	1223	1033	883 X 1000	Co					S. Spring 1 Ring 6 Kg
	[illegible]		1330	1313	1143	1023 1200						
	8585		1283	1223	753	943 1160						

			25	50	100	150	150 ½	Hot	200	½	Hot	
1062 RA — washed decantation.	8586	1290	1243	1207	1240	1183	1210	863	1130	1150	303	
4.4 ½ f 24.4 —	8587	1280	1240	1200	1227	1200	1227	333	1173	1197	263	Co
21 K	8588	1290	1247	1207	1170	1110	1150	307	1077	1102	283	
Dup 8586 —	8589	1183	1283	1240	1167	977 1160						
21 K 2 LiOH.	8590	1193	1290	1243	1177	1000 1163		Co				
	8591	1197	1303	1237	967	860 1000						
Reg lubes 1/3 Turn —	8592	1100	1247	1067		893	1000	683				
Was 8430 9:55 W Dr 50 μ in p dres — X03 peacock.	8593	1077	1247	1043		863	960	687		Co		
4.4 ½ — 23.9	8594	1087	1247	970		810	890	690				
1068 RA low heat, washed decantation	8595	1263	1210	1190	1183	1130	1157	323				
4.4 ½ f1 — 24 g	8596	1260	1200	1180	1180	1140	1163	310		Co		
21 K	8597	1260	1180	1167	1200	1167	1190	290				
Dup 8595	8598	1167	1297	1230	1170	1027	1187	577				
21 K 2 LiOH.	8599	1173	1287	1243	1157	1017	1157	570		Co		
	8600	1173	1273	1240	1050	897	1060	550				
1068 — low heat, unwashed decantation.	8601	1200	1117	1093	1100	1057	1083	300		Co		
4.4 ½ f 24.1 gr	8602	1217	1120	1100	1087	1080	1097	207				
21 K	8603	1223	1160	1130	1110	1077	1090	290				
Dup 8601	8604	1100	1267	1223	990	793	970	560				
21 K 2 LiOH.	8605	1100	1250	1227	1110	890	1083	600		Co		
	8606	1107	1260	1173	950	867	1027	507				
1074 RA low heat, washed decantation	8607	1267	1217	1177	1160	1117	1140	293				
4.4 ½ f No 3 peacock	8608	1280	1217	1120	1097	1010	1043	320		Co		
21 K	8609	1277	1210	1190	1177	1110	1140	283				

S.S. 1 Ring

			25	50	100	150	150 ½	~~Heat~~
Dup 8607 21K 2 Loft	8610	1190	1347	1300	950	810	967	507
	8611	1187	1313	1280	857	753	880	523
	8612	1187	1327	1313	867	733	853	507 x
1074 RA Dried lowheat washed percolation 4.4 flake ½ 23.8 g 21K	8613	1187	1133	1117	1127	1100	1127	303
	8614	1190	1150	1133	1130	1113	1127	270
	8615	1177	1130	1100	1103	1093	1110	267
Dup 8613 21K 2 Loft –	8616	1067	1230	1240	1110	833	1050	547
	8617	1080	1243	1250	1000	817	1000	527
	8618	1083	1240	1250	1020	827	1007	547
721 RA ½W not filtered washed percolation – low heat 4.4 ½ f 3 21K	8619	1217	1113	1090	1073	1063	1077	207
	8620	1223	1130	1090	1123	1077	1090	213
	8621	1227	1157	1147	1187	1133	1157	273
Dup 8619 21K 2 Loft –	8622	1217	1327	1327	1153	857 x	977	553
	8623	1190	1283	1285	1113	97 x	1040	527
	8624	1217	1323	1310	1093 x	1010 x	1457	590
1064 RA Dried lowheat washed percolation – 4.4 f peacock ½ No3 – Zn Hydgn – 21K	8625	1257	1207	1190	1190	1160	1180	283
	8626	1250	1207	1213	1240	1227	1247	227
	8627	1250	1207	1163	1140	1093	1123	273
Dup 8625 21K 2 Loft X	8628	1220	1387	1363	1170	933	1110	607
	8629	1220	1343	1363	1113	900	1060	540
	8630	1227	1427	1350	1127	910	1067	483
1066 RA lowheat washed percolation – No3 f ½ peacock – 4.4 – 24.1 g 21K	8631	1250	1197	1193	1213	1193	1217	260
	8632	1253	1197	1177	1173	1150	1267	263
	8633	1253	1210	1177	1190	1167	1190	263

S-1R -

B-S 2 Ring

S - 2 Ring

S 2 Ring

3)2743
914

acc
ZnH flake

			25	5		0	150	150½	Hot	200	½	Hot	
Dup 8631	8634	1190	1323	1357		1157	933	1173	467		Co		
21K 2 LiOH.	8635	1193	1303	1280		1060	990	1147	450				
	8636	1193	1383	1373		1050	883	—	463				
E 47 719 2 hours Conc SrCl2 - drain - dried ZnSO4 3½ hours 4.4 ½ 703 [illegible] Zn hydrazin	8637	1150		1087		Co							
21K	8638	1167		1067									
Dup 8637	8639	923	1093	Co									
21K 2 LiOH	8640	857	1037										
E 48 719 Ra 2 hours [illegible] 2 hours Conc SrCl2 drained dried soak 3½ hours MgSO4 - 4.4 No 3 f	8641	1200	1177	1127		1093	1077	1100	310	1067	1100	333	Co
21K	8642	1217	1187	1153		1120	1107	1130	273	1090	1107	313	
Dup 8641	8643	980	1133	Co									
21K 2 LiOH -	8644	843	960										
E 49 708 green SrCl2 2 hours dried soak KSO4 6 hours, changed KSO4 3 times No 4 f 4.4 - 234 green	8645	1223	1177	1127		930	943	1000	393	Co		~~Hot~~	
21K	8646	1227	1170	1117		953	1023	1060	387				
Dup 8645	8647	1057	1300	1223		827	827	1000	667	Co	Note dif with SrSO4 on 708 & Ra XXX		
21K 2 LiOH.	8648	1063	1310	1173		763	757	893	577				
E 59 Ra XXX soak 2 hours SrCl2 - dried - soaked KSO4 - changed 3 times - No 3 f 4.4 - 239	8649	1273	1263	1223		1120	1067	1133	383	Co			
21K	8650	1293	1280	1253		1213	1143	1217	367				
Dup 8649	8651	1067	1290	1190		900	800	933	493	Co S on	S 2 Rings		Co
21K 2 LiOH —	8652	1073	1247	1227		933	797	940	500	S	2 Rings —		
1066 Ra - low heat washed decantation No 3 f 4.4	8653	1280	1223	1177		1180	1133	1160	267	Co			
[illegible]	8654	1267	1266	1117		1117	1057	1093	197 ^{5}				
21K	8655	1283	1233	1147		1123	1067	1107	257				
Dup 8653	8656	1200	1363	1277		883	743	867	407		~~8~~		Co
21K 2 LiOH.	8657	1203	1333	1293		1000	810	933	440	S	1 Ring		
	8658	1197	1330	1253		950	763	873	437	DS	1 Ring		

			25	50	100	150	150½	Hot	
64 RA Dried low heat washed by decantation 3 1½ [illegible] ZnH. 4.4 - 23.8 21K	8659	1303	1260	1200	1170	1120	1150	263	Co
	8660	1293	12.33	1147	1087	1067	1100	267	
	8661	1293	1247	1217	1187	1110	1143	260	
Dup 8659 K 2 LiOH,	8662	1227	1367	1367	947	867	973	370	Co
	8663	1213	1320	1280	x 5.0 807 2 Rings	663	767	397	VBS – 2 rings
	8664	1217	1320	1267	900 x 1 Ring	703	857	370	S O 2 Rings
E 53 719 – 2 hours soak all night conc $SrNO_3$ dried – Soak $ZnSO_4$ all day all night washed 4.2 No 3 41 21K	8665	1093	973						Co
	8666	1100	970						
Dup 8665 21K 2 LiOH –	8667	853	1000						Co
	8668	830	980						
E 54 719 2 hours all night in $SrNO_3$ dried again 22 hours $MgSO_4$ washed 21K	8669	1193	1177	1147	1117	1087 1100	253		Co
	8670	1197	1190	1147	1107	1077 1090	303		
Dup 8669 21K 2 LiOH –	8671	983	1220	1100					Co
	8672	1023	1293	1177					
E 55 719 2 hours Soak 2 hours $SrCl_2$ dried soak all night phos Soda normal. washed 21K	8673	1200	1177	1103					Co
	8674	1207	1177	1047					
Dup 8673 21K 2 LiOH – S S Note This	8675	360	853	1040	67				Co Note 8430 with phos –
	8676	167	683	1013	1033				Change [illegible] occ[illegible] tube ok
E 56 719 soak conc $MgCl$ all night dried boiled KOH – washed free alk 21K	8677	1160	960	970					Co
	8678	1150	963	970					
Dup 8677 21K 2 LiOH,	8679	920	1090	1033					Co
	8680	930	1117	1057					
E 57 $SrCl_2$ – KSO_4 finished green soak 4 hours $BiCl_3$ NH_4Cl dried KOH 21 2 mins then 10% acid wash 21K	8681	840	873						
	8682	997	1033						
D									

			25	50	100	150	150'/2	Hot	
Dup 8681	8683	1033	1333	1300	1237	957	1003	823	Co
21K 2 LiOH.	8684	1013	1333	1267	1270	1020	1073	737	
E 58 719 2 hours soak 16 hours 1/2 [illegible] $BiCl_3$ NH_4Cl washed 3 or 4 times - dried - soaked KOH 21 3 hours then 10% + boil - washed 4.4 NO_3 fl	8685	1017	1103	1050	1000	Co			
21K	8686	997	1113	1060	1030				
Dup 8685	8687	1060	1413	1303	1260	1027	1337	1053	Co
21K 2 LiOH —	8688	1073	1400	1287	1210	1030	1260	1050	
E 59 - $SrCl_2$ soak 2 hours - dried - soaked all night aluminate K washed NO_3 f 4:1	8689	387	1127	1027	Co				
	8690	390	1137	1030					
Dup 8689	8691	863	950	Co					
21K 2 LiOH.	8692	867	1000						
E 60 719 2 hours 2 hours Conc $SrCl_2$ dried soak all night KSO_4 - 4.2 NO_3 fl	8693	1230	1203	1177	1147	Co			
21K	8694	1220	1197	1140	1087				
Dup 8693	8695	1067	1203	1160	Co				
21K 2 LiOH.	8696	1067	1203	1177					
61 E Soak all night Conc $BaCl_2$ dried soak 24 hours K Chromate. 4.1 NO_3 ft	8697	1180	1133	1027	8697 Fe hunt. on 25 run was 165 then 217 400 740 | changed Fe 347 Fe here ok	Co			
21K	8698	1183	1153	1093					
Dup 8697	8699	1067	1263	870	Co				
21K 2 LiOH.	8700	1067	1240	883					
	8701								
	8702								
	8703								
	8704								
	8705								
	8706								

	S		25	50	100	150	150½	Hot	200	½	Hot	
	8707											
	8708											
	8709											
	8710											
	8711											
	8712											
1070RA - Dried low heat washed by percolatn 4.2 NO3 green green bulky 23.9	8713	1250	1197	1150	1177	1097 220 1103						
	8714	1240	1197	1190	1190	1067 223 1107	Co					
21K 7225	8715	1243	1180	1160	1187	1107 270 1127						
Dup 8713	8716	1153	1303	1193	910	833	942	397				
21K 2 LiOH -	8717	1153	1297	1237	980	847	947	403	Co			
	8718	1153	1250	1237	883	770	867	434				
1070RA washed percolation Dried low heat, 4.0 NO3 f 23.9 green	8719	1260	1177	1167	1210	1160 1103			1110	1140	363	
	8720	1243	1177	1167	1220	1033 1163			1140	1163	330	Co
21K 7563	8721	1263	1183	1187	1250	1173 1200			1103	1140	340	
Dup 8719 X	8722	1210	1323	1330	1073	933	1050	483				
21K 2 LiOH.	8723	1220	1333	1333	1073	910	1033	490	Co			
	8724	1190 1207	1400	1340 1334	1053 1066	893	1013	480				
1072RA Dried low heat washed percolation 4.1 NO3 fl - 23.8	8725	1260	1190	1183	1180	1133	1143	297	1077	1100	220	
	8726	1247	1187	1170	1173	1143	1157	273	1110	1127	243	Co
21K 7197	8727	1253	1193	1183	1160	1183	1170	270	1173	1183	223	
Dup 8725	8728	1143	1333	1200	1083	800	967	493				
21K 2 LiOH.	8729	1177	1333	1237	987	860	933	500	Co			
	8730	1160	1333	1243	1000	833	960	470				

2736
912

			25	50	100	150	150½	Hot	200	½	Hot	
1072 RA Dried low heat washed percolation 4.3 NO_3 f – 23.9 21K 7637	8731	1270	1200	1190	1187	1130	1163	317	1100	1123	210	G
	8732	1267	1200	1187	1217	1173	1200	324	1133	1150	240	
	8733	1260	1180	1133	1157	1093	1113	287	1063	1080	230	
Dup 8731 21K 2 LiOH.	8734	1190		1307	1033	867	993	433	827	960	570	Co
	8735	1213		1293	1073	883	993	450	843	983	570	
	8736	1200		1267	1127	847	873	480	713	833	603	
8842 62 E 719 2 hour Lot 49 $SrCl_2$ – then put in $SrCl_2$ again 12 hours dried then $MgSO_4$ 12 hours 4:1 NO_3 f 21K 4:1 f 23.9 grams – 7589	8737	1180	1157	1133	1143	CO						
	8738	1177	1153	1140	1143							
Dup 8737 21K 2 LiOH	8739	1030	1200	1173	1093	1000	1083	567	CO			
	8740	1053	1200	1160	1057	993	1077	547				
E 64 719 2 hours – 12 hours Conc $MgCl_2$ drained – not dried put in Normal K_2Phos 12 hours washed 4:1 NO_3 fl 23.9 g 21K 7375	8741	1163	1077	Co								
	8742	1190	1087									
Dup 8741 21K 2 LiOH.	8743	950	1123	1110	900	Co						
	8744	943	1130	1127	927							
73 E – 719 2 hours 12 hours Conc $Ni(OH)_2$ in NH_4Cl NH_4 – dried boiled KOH. 4:3 NO_3 fl – 23.9 21K 7787	8745	1177	1100	Co								
	8746	1163	1067									
Dup 8745 21K 2 LiOH –	8747	1167	1287	1297	1080	1023	1167	523	950	1070	490	S. 1R Cc G
	8748	1133	1253	1253	857	713 *	797	543	633	683	450	VBS 1 Ring
E 75 Lot 49 – 12 hours in $Ni(OH)_2$ in NH_4Cl NH_4 – dried boil KOH. 23.9 4:1 NO_3 fl Lot 49 in $SrSO_4$ – 21K 7560	8749	1267	1233	1197	1127	CO						
	8750	1273	1220	1190	1140							
Dup 8749 21K 2 LiOH.	8751	1100	1267	1237	1023	950	1077	650	Co			
	8752	1127	1313	1283	1077	867 *	1023	690				Split 1R.
E 63 719 2 h $MgSO_4$ 12 hours dried then $SrCl_2$ 12 hours – washed 4:3 NO_3 fl 23.9 21K 7719	8753	1190	1167	1133	1163		CO					
	8754	1213	1160	1123	1147							
Dup 8753 21K 2 LiOH —	8755	1117	1320	1240	1067	1007	1100	CO				
	8756	1120	1287	1267	1067	990	1093					
End this batch of cake	5 5 1 1											

			25	50	100	100½	Hot	150	150½	Hot	200	½	Hot	
E 65 719 in MgCl$_2$ drained only not dried in 12 hours then Na$_2$CO$_3$ 12 hours – 4.2 128 f 23.9 – 21K 7241	8757	1107	950	Co										
	8758	1100	933											
Dup 8757 21K 2 LiOH.	8759	983	1163	Co										
	8760	950	1147											
E 66 719 2 h – 12 hours Na$_2$CO$_3$ dried MgCl$_2$ 12 hours 4.1 128 A f 23.9 – 21K 7133	8761	1143	1023	Co										
	8762	1163	993											
Dup 8761 21K 2 LiOH.	8763	983	1180	Co										
	8764	973	1180											
E 67 – 719 – 12 hours Na$_2$CO$_3$ dried 12 hours in CaCl$_2$ – 4.1 128A fl 24.2 21K 7151	8765	1197	1110	1117	1167	1177	207	1213	1223	263	1203	1217	233	Co
	8766	1173	1117	1110	1167	1180	220	1223	1237	330	1153	1167	253	
719 2 hours 129 flake 4.3 – heavy seems be stuck together – flake broken. Mixed 40 drops a to 20 gms flake 24. 21K – 7584	8767	1207	1150	1160	1207	1220	260	1173	1183	290	1197	1207	243	Co
	8768	1140	1063	1053	1103	1123	190	1090	1077	217	1047	1053	207	
Dup 8767 21K 2 LiOH —	8769	1157	1277	1260	1247	1333	390	1187	1263	450	Co			
	8770	1123	1283	1257	1190	1293	403	1103	1300	503				
Dup of 8765 21K 2 LiOH.	8771	1127	1267	1247	1193	1267	449	1103	1263	500	Co			
	8772	1143	1303	1260	1207	1297	470	1117	1283	510				
68 E 719 – 12 hours Phos Soda dried 12 hours BaCl$_2$ 4.2 128 A f 23.8 21K 7439	8773	1247	1170	1183	1250	1267	400	1247	1263	443	1263	1283	287	Cos
	8774	1240	1183	1187	1243	1253	370	1237	1243	413	1250	1273	270	
Dup 8773 21K 2 LiOH –	8775	1150	1300	1287	1170	1383	590	1103	1320	567	1073	1287	573	
	8776	1133	1257	1267	1183	1363	547	1170	1320	567	1123	1307	567	
E 69 719 – 12 hours BaCl$_2$ dried 12 hours MgSO$_4$ – 4.1 128 A f 21K – 24.1 7454	8777	1223	1183	1183 S both	1220	1223	340	1223	1230	327	1200	1213	270	Co
	8778	1193	1163	1163	1200	1220	337	1197	1223	317	1170	1183	293	
Dup 8777 21K 2 LiOH.	8779	1077	1237	1250	1210	1303	533	1133	1247	563	1070	1147	553	Co
	8780	1107	1300	1303	1240	1323	487	1130	1253	600	1130	1223	583	

	250R	½	Hot	300	½	Hot
8773	1207	1237	607	1217	1253	607
8774	1187	1233	523	1113	1200	527

	350		
8773-4	1110	1200	410
	1083	1150	417

			25	50	100	100½	Hot	150	150½	Hot	200	½	Hot	
E 71 719 - 12 hours Naphos dried 12 hours $CaCl_2$ 4:1 128 A f 24- 21 K 7368	8781	1253	1200	1180	1190	1210	297	1163	1180	267	1143	1160	257	Co
	8782	1243	1183	1173	1223	1247	293	1173	1183	290	1150	1160	273	
Dup 8781 21 K 2 LiOH	8783	1133	1273	1280	1180 1357	1	487	1103	1303	620	1110	1237	650	5a Co
	8784	1117	1283	1273	1160 1433		473	1167	1350	603	1110	1237	637	
E 72 719 - 2 h - 12 hours in $CaCl_2$ dried 12 hours K fluoride - 4:1 NO_3 f - 24- 21 K 7348	8785	1243	1243	1230	1240	1263	280	1200	1217	313	1170	1183	263	Co
	8786	1233	1197	1193	1193	1217	313	1183	1193	280	1110	1127	270	
Dup 8785 21 K 2 LiOH	8787	1150	1347	1353	1230	1410	580	1103	1317	713	1067	1247	743	
	8788	1163	1330	1353	1240	1390	587	1207	1373	727	1133	1307	767	
E 77 - 719 2 h - soak 1½ hours Conc $BiCl_3$ acetone - 4.2 24.1 7583	8789	1020	1103	1100	1097	1127	330	1110	1143	270	1100	1123	277	Co
	8790	1033	1063	1100	1117	1143	310	1133	1167	237	1087	1110	283	
Dup 8789 21 K 2 LiOH flake acid treated	8791	1067	1380	1400	1323		1007	1343	1509	1147	1257	1533	990	
	8792	1060	1380	1387	1400		1060	1350	1453	1087	1307	1450	970	
E 78 - 719 2 h - ½ strength $BiCl_3$ acetone - as used in E 77 wkd same as 77 - acid treated NO_3 f 24.2 4.3 f 3 - flakes not Electrolated heavy 21 K 7460	8793	1197	1300	1290	1333	1463	937	1290	1427	977				
	8794	1190	1317	1263	1327	1453	903	1260	1390	993				
E 79 - more of $BiCl_3$ acetone no fe - uncompletated same as E 77 - acid flake - 4.3 23.8 4.3 - 7535	8795	1200	1397	1333				1253	1393	1007	1223	1447	1087	[illegible]
	8796	1177	1350	1273				1257	1400	1010	1183	1353	993	
719 2 h NO_3 ½ acid treat - 21% with 2 grams precipitated Bi(OH) not boiled in electrolyte 4.2 - 24.1 21% 2 grams LiOH - 128 A ff 7594	8797	1167	1367	1330	[illegible] 1413	1477	677	1320	1507	747	[illegible] 283			
	8798	1147	1810	1183	1323	1370	617	1220	1390	694	853			
Dup 8797 1 gram Bi OH " 21 K 2 LiOH 7596	8799	1137	1297	1220	1297	1350	583	1197	1357	700	1047			150 lb Run [illegible] Fe
	8800	1153	1347	1320	1397	1443	597	1267	1437	680	1013			
Dup 8797 400 milg BiOH " 21 K 2 LiOH	8801	1123	1357	1303	1280	1353	623	1200	1360	623	1153			O put in after they came off
	8802	1117	1307	1283	1287	1387	663	1233	1397	643	1223			
Dup 8797 200 milg BiOH 129 f 21 K 2 LiOH — 7679	8803	1083	1260	1223	1227	1347	570	1180	1307	583	927			
	8804	1123	1333	1303	1283	1443	657	1260	1387	673	1213			

See Annex

			25	50	100	100 ½	Hot	150	150 ½	Hot	200	½	Hot
719 – 3 grms metal Bismuth fabricated Seeds tubes – 4.3 NO3 acid ½ – 24.1	8805	1170	1323	1320	1250	1490	570	1293	1473	580	1157	1490	X
21K 2 LiOH – 7702	8806	1170	1303	1307	1293	1433	583	1253	1467	553	997	1457	
Edison 77 – 3 f acid 4.2 flake heavy 24.1	8807	1040	1323	1417	1417	1440		1510	1547	1070	1410	1437	980
21K 2 LiOH RUN COLD 2.33 7508	8808	1047	1307	1400	1397	1417		1463	1483	777	1407	1430	1123
Edison 78 3 f acid – 4.3 24.1.2	8809	1190	1237	1300	1338	1397		1373	1443	997	1317	1387	1107,
21K 2 LiOH RUN COLD 7354	8810	1150	1230	1280	1313	1363		1333	1397	843	1310,	1363	1010
	8811				8807	250 1370 840 1410	300 1440	1483	830	350 1463	½ 1527	900 1067	Annex
	8812				8808	1353 1072 1390	1427	1457	1050	1327	1390		
Edison 78 Treated further with small amount HgCl2 precip by KOH · 4.3 fl acid	8813				8809	1293 917 1317	1320	1393	1023	~~350~~ 1310	1413	860	
21K 2 LiOH	8814				8810	1260 887 1117	1277	1340	880	1250	1343	850,	
Edison 80 719 – soaked 1/4 strength BiCl3 Acetone – not free Fe, washed with acetone – KOH heated – washed –	8815	1120	1150	1150	1183	1227	310	1200	1243	263 purple	C-0		
129 f acid – 21K 4.2 23.7 7580	8816	1093	1127	1130	1167	1217	307	1180	1227	270			
Dup 8815	8817	1177	1330	1313	1267	1447	807	1250	1567	880			
21K 2 LiOH.	8818	1153	1300	1290	1193	1447	760	1047	1510	850			
719 2 h – 3 f acid – not electrolated after tubes loaded E soaked in BiCl3 acetone free of Fe, precip by KOH, wash free – 4.2 24	8819	1157	1287	1243	1237	1267	393	1193	1250	383	1160	1183	490 Co
21K ~~7607~~ 6.46	8820	1127	1270	1243	1227	1257	333	1227	1257	260	1197	1213	420
Dup 8819	8822	1143	1470	1470	1400	1587	767	1427	1613	850	1397	1553	860
21K 2 LiOH,	8823	1143	1490	1433	1333	1607	770	1327	1650	870	1300	1550	900
Dup 8819 but ½ strength BiCl3 in Acetone –	8825												
21K	8826												
	8827												
	8828												

2

See annex

			25	50		100	100½	Hot	150	150½	Hot	200	½	Hot	
	8828														
	8829														
	8830														
Edison 31 which is 2 77 having a little HgO precip in pores f 3 not el[illegible] acid [illegible] 23.8 4.2 f 21K 7532	8831	1033	1153	1167		1143	1193	333	1100	1140	297		Co		
	8832	1033	1150	1143		1133	1173	317	1113	1160	283				
Dup 8831 21K 2 LiOH.	8833	1047	1320	1293		1243	—	640	1317	1400	933	1260	1367	817	Annex
	8834	1103	1343	1333		1217	—	867	1353	1513	1090	1330	1457	900	
Edison 84 717.2 h 25 mm in Tetrachloride Tin in Acetone, dried then KOH. f 3. acid - 4.2 - 24. 21K 7431	8835	1160	1167	1107		1130			1090	1107	220		Co		
	8836	1157	1143	1093		1133			1113	1127	237				
Dup 8835 21K 2 LiOH.	8837	1057	1190		Co										
	8838	1038	1187												
722 D (Decantation) No much ½ wash liquors saved almost neutralized - NiOH washed 3 with input back in the neutralized liquors, boiled settled - filtered in bags, dried low heat — 21K NO3 acid fl 5.10	8839	943	993	943		Co									
	8840	930	977	927											
Dup 8839 21K 2 LiOH.	8841	847	927	Set aside		to dep in Bismuth —									
	8842	827	930												
Dup of 8839 - but washed percolation 722D 21K 4.98	8843	890	917	890		Co									
	8844	900	927	893											
Dup 8843 21K 2 LiOH.	8845	787	893	Set aside		to dep in Bismuth —									
	8846	783	887												
Dup 8839 But filtered in press washed decantation 722 E 21K 4.2 23.9 6140	8847	937	980	947		Co									
	8848	957	977	957											
Dup 8847 21K 2 LiOH	8849	857	960			Set aside for Bismuth —									
	8850	853	957												
Dup 8839 - 722 E filtered in press wash percolation 21K 4.2 23.9 5807.	8851	873	923	880		Co									
	8852	893	927	883											

			25	50	100	100½	Hot	150	150½	HoT	200	½	Hot [illegible] Hot	
Dup 8851 21 K 2 LiOH.	8853	797	845											
	8854	770	830											
Edison 85 719 2 h soaked Conc $HgCl_2$ 3½ mins — dried — then soaked Conc NH_4 — then KOH. 4.2 f acid 23.7 21 K 7460	8855	1240	1240	1267	1257	1267	227	1177	1193	217	1107	1217	2977	CO
	8856	1223	1220	1243	1233	1247	277	1133	1153	217	1097	1113	2637	
Dup 8855 21 K 2 LiOH	8857	1127	1300	1293	1237	1310	550	1163	1253	573				
	8858	1110	1300	1283	1227	1307	580	1143	1250	573				
Edison 86 719-2 h — soaked nearly Con Stannous chloride in Acetone 3½ hours then KOH — Bad acetone — No 3 f acid 4.2 — 23.9 21 K 7435	8859	1137	1153	1117	1130	1143	200						200	CO
	8860	1127	1157	1133	1163	1193	203						203	
Dup 8859 21 K 2 LiOH.	8861	1053	1167	1157	1143	1247	590							CO
	8862	1090	1160	1150	1133	1200	547							
Edison 87 — 719.2 h — soak Cond Cadmium Bromide. 3½ hours dried Then KOH. — 4.2 23.9 21 K 7530	8863	1243	1190	1173	1177	1197	267						267	CO
	8864	1250	1213	1200	1200	1213	247						247	
Dup 8863 21 K 2 LiOH —	8865	1027	1183	1160	1167	1213	620							
	8866	1043	1183	1163	1163	1220	487							
Edison 100 — 719-2 h — TUBES soak 15 min $BiCl_3$ Acetone XCP — (distil with $BiCl_3$) washed acetone — dried 12 hours Top of flask 1 ft from hotplate then KOH, washed free 4.2 No 3 f acid 21 K — 24. no heat 7745	8867	1210	1257	1227	1260 1270		240						240	
	8868	1160	1227	1210	1227 1247		207						207	
	8869	1207	1263	1230	1257 1267		233						233	
Soaked 719-2 h in Conc $BiCl_3$ acetone free from iron (not CP acetone) dried — then KOH — 4.2 24 RUN COLD 21 K 2 LiOH — 7672	8870	1123	1267	1327	1370 1433		R. cold 923							
	8871	1133	1270	1323	1367 1448		937							
	8872	1133	1283	1360	1417 1480		1013							
Dup 8870 27% K 2 LiOH.	8873	1217	1270	1367	1377 1523		1097							
	8874	1223	1273	1377	1367 1513		1110							
Edison 98 — 719-2-h Soak Conc $BiCl_3$ Acetone XCP dried ord temp. then soak KOH all night kept in [illegible] — 4.3 — 24.1 21 K 7688	8875	1057	1217	1153	1130	1197	240						240	CO
	8876	1067	1227	1173	1133	1207	200						200	

C.8881 10th cold run

			25	~~50~~	100	100½	Hot	
Dep 8875 21K 2 LiOH.	8877	1140	1333	1357	1283 1497		1037	
	8878	1157	1353	1357	1293 1500		1057	
Dep 8875 27% K 2 LiOH.	8879	1257 c	1410	1320	1303	1550	1200	
	8880	1257	1350	[illegible]	1227	1504	1193	
Edison 101 719-2-h-heated long time Conc aluminate K-washed free 21K 4.2 24. 7331	8881	997	997	1090	1123	1157	277	Co
	8882	980	997	1103	1143	1167	273	
Dep 8881 21K 2 LiOH.	8883	833	1123		Set aside 13 c small dip			
	8884	830	1133					
Edison 103 — 719 soaked Tungstate Soda hot long time — Co washed free. 21K 4.3 24.1 7422	8885	1137	1183	1140	1167	1173	167	Co
	8886	1130	1140	1117	1083	1097	163	
Dep 8885 21K 2 LiOH	8887	1067	1220	1207	1167	1257	463	Co
	8888	1093	1243	1227	1197	1283	467	
107 Edison Ni given in Hypochlorite all night — 4.3 24 21K 7430	8889	1207	1167	1133	1140	1150	160	Co
	8890	1230	1183	1140	1133	1143	163	
Dep 8889 21K 2 LiOH.	8891	1107	1263	1123				
	8892	1120	1283	1143				
Edison 105 719 — + 8 more soaked together all night warm — 21K 2 LiOH, washed free — Fe + Ni put up 21K — 4.3 24.8 7482	8893	1137	1133	1110	1103	1113	190	Co
	8894	1133	1123	1113	1103	1113	197	
Dep 8893 21K 2 LiOH.	8895	1063	1243	1227	1197	1267	467	
	8896	1063	1233	1210	1183	1273	500	
106 Edison Conc Thorium Chloride somewhat acid — then KOH. 21K 4.2 24.2 — 7405	8897	1080	1097	1093	1157	1167	230	
	8898	1093	1113	1090	1127	1133	227	
Dep 8897 — 21K 2 LiOH.	8899	1017	1160	1167	1147	1223	513	
	8900	1017	1177	1177	1147	1223	553	

			25	50		100	100 ½	Hot	150	½	Hot	New nums in 150 runs want 150	200		
719-2h Reg for Hollaperd for [illegible]	8901														
	8902														
	8903														
Edison 102 Hypochlorite treated 719 soak ½ hour XCP BiCl₂ Acetone air dried - then KOH - 4.2 23.8	8904	1030	1120	1087		1117	1147	297	1083	1110	330				
21K 7580	8905	1047	1120	1130		11.40	1180	420	1133	1177	447				
Dup 8904 21K 2 LiOH	8906	1067		1363		260 × 1377	1437 ½ 1397	Hot 1150 1017							
	8907	1057		1380		1300 75	Not 75	100 lb	½	Hot					
Reg flat packets for Hooper to test if they give poor cup on cldg hot. 21	8908	497	25 490 543	483 570	50 Vac Hot 310	460 542	267	418	467	243					
	8909	493	490 573	480 570	307	463 542	267	423	497	310					
	8910	493	473 567	467 563	303	437 515	260	390	453	300					
Dup 8908 flat pkts 21K 2 LiOH.	8911	400	450 617	385 503	387	303 327	347	267	243	327					
	8912	397	383 530	290 433	350	288 300	327	257	262	308					
	8913	413	463 527	347	363	235 270	350	245	258	345					
Ra 723 filtered in lab with filler. Dried low heat Decantation No 3 acid f 4.3 - 24.1	8914	1117	1133	1143		1173	1183	180	1130	1147	297				
21K 6,53	8915	1127	1143	1120		1163	1173	200	1127	1140	273				
Dup 8914 21K 2 LiOH —	8916	1093	1243	1280		1280	1357	427	1227	1340	543	1293 ×	1213	1292	723
	8917	1120	1243	1287		1287 127	1370	403	1317	1393	550	1367	1323	1400	703
Ra 723 Filtered in lab with filler press - dried low heat percolation 4.2 f	8918	1140	1167	1160		1157	1170	217	1153	1167	303				
21K 6.51	8919	1183	1197	1203		1227	1237	197	1200	1210	340			chill	
Dup 8918 21K 2 LiOH.	8920	1170	1310	1330		1333	1417	383	1303	1423	550	1393	1337	1427	667
	8921	1163	1297	1330		1313	1407	402	1350	1433	570	1407	1333	1410	710
Ra 723 - ½ wash drained bags 2 hours dried low heat Decantation according to test this should be cheap afd 70%	8922	1123	1130	1103		1127	1137	180	1120	1133	257	8920 21	300 Run 1250	1497	777
4.3 f 24 21K 7335	8923	1123	1130	1127		1127	1140	207	1113	1130	260		1190	1427	460
						250 8916 17	1150 1300	1317 623 1450 650	85 2 Rings	300 1050 1233	1233 1417	643 667 } Set aside			

Nos from 8924 To 8999 Cancelled Not used

New Fe after 150 Runs –

Co

200th run Hot New Fe after 150
1343 — 1463
1347 — 1452 –
Anneal

5 on 5 2 Rings

Co

Co

Co

Set aside

9014- 2nd run 1147 [illegible]

Solution changed to 21% 2 after 150 HR

250				
8920	1333	1500	687	
21	1347	1493	697	
9000	1193x	1300	673	DS
9001	1243x	1373	693	1 Run
9002	1167	1310	540	
9003	1263	1333	580	

300	25	50	
1123	1247	673	
1167	1370	710	
1063	1253	673	Solution [illegible]
1160	1300	567	

Dup 8922 21K 2 LiOH	9000	1120	1230	1240	✓
	9001	1110	1230	1243	
Ra 723 - ½ wash, drained 2 hours [illegible] dried low heat Percolation — 4.2 f - 24.1 21K 7320	9002	1183	1200	1197	✓
	9003	1187	1197	1193	
Dup 9002 21K 2 LiOH (250: 9004 1230 1380 793; 9005 1263 1400 790; 200: 9004 1087 1300 1767 Solution; 1190 1377 1749)	9004	1163	1327	1353	✓
	9005	1163	1290	1327	
Ra 723 ½ wash not filtered, dried low heat Percolation, 4.3 f 23.8 gm 21K 7559	9006	1140	1107	1080	✓
	9007	1183	1160	1147	
Dup 9006 21K 2 LiOH (9008x 1230 1370 653; 9009x 1167 1293 777 Sons 2 R)	9008	1140	1240	1237	✓
	9009	1140	1267	1250	
Ra 723 ½ wash not filtered — low heat — Percolation — 4.2 24.1 21K 7476 636	9010	1207	1167	1137	✓
	9011	1223	1187	1133	
Dup 9010 21K 2 LiOH — 636	9012	1180	1327	1347	✓
	9013	1170	1297	1307	
719 - 2 h ½ f acid treat — 4.3 24.2 21% KOH 1 gm KCy 2 LiOH — 7757	9014	400	Co		
	9015	460			
719 2 h ½ f acid 4.3 24.1 Electrolyte 21 KOH Containing Hydroxes 500 mlg Sb As Sn LiOH Bi Cu Cd 7406	9016	1153	1110	1200	
	9017	1160	1150	1227	
	9018	1167		1243	
719 2 h ½ f acid — Tube wire, not the CP Nickel. loaded then Soaked CP Bi(?) Acetone 1 hour 4.3 24.1 21K 7776	9019	1067	1	1187	
Dup 9019 CP Ni	9020	1113		1233	
3 gms Bi hydrox in Electrolyte 21K	9021	1147	1267		
	9022	1180	1260		

100	100 Hot	150	½	Hot	150-	200	½	Hot	
					new 7s	after 150 gm + 5 Cold 3 cycles [illegible]			
1240 1300	413	1240	1313	517	1277	1193x	1267	703	Sons 1 Ring
1240 1313	357	1223	1343	487	1317	1243	1320	733	
1190 1200	190	1190	1200	200	put in 2 LiOH 21K + back on heat cool	1207	1260	500	
1207 1220	220	1207	1213	200		1237	1277	497	
1317 1397	430	1337	1427	667	1387	1247	1360	833	New 7s after 150 R
1297 1370	433	1292	1407	590	1363	1247	1353	840	
1100 1117	203	1047	1057	173	Co				
1183 1198	217	1140	1147	187					Sons 2 Rings
1217 1277	417	1213	1267	513	1237	1207	1273	717	
1217 1283	437	1200	1297	560	1243	1150 200	1253	783	average
1177 1193	203	1147	1160	240	Co				
1197 1216	157	1137	1143	210		200 R —			
1360 1403	590	1387	1447	590	1333	1347	837		
1353 1430	530	1387	1447	587	1357	1407	797		
9012	260 R 1200	1253	577		25				
9013	1217	1253	633						
1293 1367	543	1183	1300	903	Co				
1337 1347	633	1217	1307	910					
1330 1383	570	1240	1307	953					
1167 1187	233	1127	1140	347					
1200 1220	300	1133	1150	310					
1260 1317	500	1210	new 7s 1417	650	old 7s 150 980				
1200 1383	657	1233	1437	663	907				

after 5 Runs put in new rooms — before put in new 7s 1st run even

Average

1230
1050
2nd 1323
1080

The run on 9013 was off- but it worked probably got OK without changing rooms

Put back on Hot with the new 7s

give to [illegible]

9029 1317 ½ V
9031 100 to V.

			25	50	
Dep 9019 But 21 KOH 2 LiOH, 1 gram Bismuth hydrox	9023	1160	1240	1267	
	9024	1177	1217	1283	
719 2 h ½ f acid not filtered 6 Rings on – 4.3 24.2 21K 2 LiOH 7750	9025	1203	1290	1263	
	9026	1210	1330	1327	
Dep 9025 8 Rings	9027	1203	1297	1287	
	9028	1200	1293	1277	
Dep 9025 6 Rings 33% K 9 gram LiOH	9029	13	560		
	9030	900	627	Co	
Dep 9025 8 Rings 33% K 9 gram LiOH	9031	13	667		
	9032	7	927		
719 2 h ½ f 21% K 2 LiOH, 50 milg platinum hydroxide	9033		1200	1173	
	9034		1200	1130	
Dep 9033 21K 2 LiOH 50 milg Gold hydrox	9035	1123	1183	1157	
	9036	1150	1217	1207	
Dep 9033 21K 2 LiOH. 150 milg Palladium hydrox	9037	1117	1227	1060	
	9038	1120	1220	1177	Hot
Dep 9033 21K 2 LiOH. 150 milg Osmic acid old sol.	9039	x 1197	1217	1120 1127	403
	9040	1180	1193	1127 1143	443 Hot
Dep 9033 21K 2 LiOH. 150 milg Ruthenium hydrox	9041	1173	1200	1150 1170	513
	9042	1147	1167	1123 1143	537
Dep 9033 21K 2 LiOH. 150 milg Iridium hydrox	9043		1210	1133	
	9044		1210	1167	

X 9039 – went bad 3rd run cold changed [illegible] then off –

100	100 Hot	150	½	Hot		200	½	Hot	
1257 1400	610	1253	1360	543		1143	1293	610	Annex
1283 1407	653	1217	1383	550		1153	1290	567	
1220 1307	480	1200	1300	513	1170	1290	593	Annex	
1280 1393	543 -	1243	1353	580	1197	1340	633		
1250 1350		1227	1263	543	1163	1300	633	Annex	
1263 1360		1243	1333	513	1173	1330	657		

Busted bad Rings are [illegible]

Busted in one or 2 [illegible] 1 or 2 rings broken

R —

Orig sol. [illegible]			New Sol. 21% only
733 717	447	change ~~[illegible]~~ to 21KOH –	1243
707 733	373	Co	1287
747 747	350		1270
880 913	417		1363
590 593	320		1290
727 747	407		1133
670 683	353		1257
710 723	370		1260
673 723	397		1253
697 730	393		1283
683 710	370		1280
715 760	417		1272

Co

9047 107 to ½ V
9053 once 223 to V

			25	50		100	Hot	150	½	Hot	7433	A—	923	
719 2 hours ½ acid treat not Electrolyzed 21% K 2 LiOH ½ gram Bismuth hydrox. & 2 grams phosphate K normal salt 21K —	9045	1153	697			400 1167	277							Co
	9046	1130	873			413 1087	247							
	[illegible]	93.												
1 tube filled only from Bismuth Oxide Reg flake ind	9047	93	63	77				137	210	13.				Co
RA 722 F 307 grams #722 Li persulphated 30 min 1000 Co 10% NaOH. washed percent 7 times—dried H2O 4.3 23.9 and flake ½ 21K - 6100	9049	963	968		Co									
	9050	963	940											
Dup 9049 21K 2 LiOH	9051	890	960	870		Co								
	9052	867	947	867										
Bismuth hydrate not only done instead green in	9053	77	120	127				157	170	93				Co
RA 722 A. not filled dried Cow h washed percolation - 4.3 24.1 21K 6112	9054	983	977		Co									
	9055	950	947											
Dup 9054 21K 2 LiOH.	9056	880	973	873		Co								
	9057	893	990	907										
RA 724 filled press, low heat. decantation - 4.3 23.9 21K 6839	9058	1117	1100	1123		1140 1163	160	1110	1117	207				Co
	9059	1133	1130	1157		1150 1167	200	1123	1130	233				
Dup 9058 21K 2 LiOH —	9060	1073	1200	1237		1260 1313	487	1217	1313	447	1167	1313		Co
	9061	1067	1233	1257		1267 1343	510	1213	1303	470	1183	1317		
RA 724 ½ W drained filler, ~~[illegible]~~ bag, 2 h— low heat percolation 21K 4.3 24.3 6797	9062	1117	1113	1113		1140 1140	193	1143	1153	247				Co
	9063	1123	1100	1100		1150 1170	153	1110	1117	243				
Dup 9062 21K 2 LiOH.	9064	1100	1227	1243		1217 1267	450	1223	1293	463	1093	1253		Co
	9065	1073	1200	1207		1153 1213	513	1150	1250	440	1043	1173		
719 - 2 h - ½ f acid 6 Rings	9066	1107	1057	1067		1093 1107	187	1067	1077	230				Co
	9067	1103	1043	1037		1047 1057	163	1007	1017	233				

9047 Cooper failed to put them in 21K 2 LiOH.
April 14 1908 —

			25	50	100	Hot	100 1/2	150	1/2	Hot	200	1/2	Hot
Dup 9066 21K 2 LiOH —	9068		1253	1250	1257	403	1370	1150	1357	637	1000	1323	627
	9069		1255	1257	1233	453	1360	1207	1333	700	1133	1343	657
Dup 9066 8 Rings 21KOH	9070		1070	1097	1127 1137	183		1077	1087	240	Co		
	9071		1040	1030	1057 1067	160		983	997	200			
Dup 9070 8 Rings 21½K 2 LiOH	9072		1257	1253	1247	407	1380	1207	1323	683	1220	1360	677
	9073		1287	1300	1247	417	1380	1267	1373	710	1270	1397	717
RA 724 ½W drained bags 2 hours low heat decantation ½ acid fl 21K 4.3 23.9 5.96 6809	9074	1157	1183	1183	1190 1203	203		1163	1177	187	Co		
	9075	1147	1163	1150	1170 1193	187		1143	1150	233			
Dup 9074 21K 2 LiOH —	9076	1067	1233	1213	1217	327	1280	1233	1303	650	1250	1350	683
	9077	1063	1240	1260	1240	367	1290	1260	1317	653	1323	1377	723
RA 724 filtered in press low heat percolation — 21K 4.3 23.9 6751	9078	1140	1163	1157	1170 1183	197		1127	1133	183	Co		
	9079	1130	1127	1133	1147 1163	207		1130	1143	160			
Dup 9078 21K 2 LiOH	9080	1080	1213	1227	1227	337	1277	1250	1317	633	1307	1373	700
	9081	1073	1200	1227	1223	380	1287	1257	1330	637	1327	1393	720
RA 1080B decantation — Press [illegible] NaOH in cold ½ w filter in press dried very low heat washed decantation cold H2O - [illegible] H2SO4 - 4.3 24.1 21K 6744	9082	1093	1133	1147	1177 1200	233		1150	1157	213	Co		
	9083	1093	1127	1130	1127 1140 1152	200		1107 1128	1113	193			
Dup 9082 21K 2 LiOH —	9084	1060	1173	1238 1220	1223	393	1283	1230	1327	670	1313	1387	707
	9085	1060	1170	1223	1213	430	1310	1233	1327	677	1310	1393	733
1080B Percolation — filtered in press Same as 9082 Except percolation 4.3 24.3 6691	9086	1060	1083	1093	1093 1117	167	Co						
	9087	1087	1113	1110	1107 1127	153							
Dup 9086 21K 2 LiOH	9088	1040	1140	1190	1150	410	1253	Co					
	9089	1050	1170	1200	1133	447	1267						
	~~9090~~	~~1137~~	~~1127~~	1143									
	~~9091~~	~~1147~~	~~1150~~	1160									

2)2257
1128

		Cold	25	50	100	100 ½	Hot	150	½	Hot	200	½	Hot
Ra 1080 A. Dried low h— percolation Cold water 4.2 24. 21K 7058	9090	1117	1127		1130	1140	203	1140	1150	273			Co
	9091	1117	1150		1157	1170	217	1177	1190	280			
Dup 9090. 21K 2 LiOH —	9092	1087	1253	1317	1260	1377	407	1320	1393	717	1340	1427	767
	9093	1110	1227	1283	1250	1337	370	1317	1383	670	1350	1450	760
Ra 1080 low heat, Decantation Cold water – 4.4 24.2 21K 7052	9094	1083	1083	1110	1123	1137	180	1087	1103	217		Co	
	9095	1093	1143	1143	1170	1183	193	1143	1153	247			
Dup 9096 21K 2 LiOH	9096	990	1177	1200	1217	1267	480	1227	1310	580	1170	1320	603
	9097	993	1183	1207	1240	1283	470	1250	1263	550	1193	1310	527 Co
Ra 722 B not fil, dried high heat percolated – 4.2 24. 21K 6172	9098	907	963	Co									
	9099	920	963										
Dup 9098 21K + 2 LiOH.	9100	1083	990	923	880	1007	500	9	Co				
	9101	1093	990	917	860	917	475						
Ra 1081 A washed percolator bag filling NaOH [illegible] NaOH ½ [illegible] then add 10% NaOH. boil ½ [illegible] bag [illegible] percolator [illegible] dried dry before percolation 4.4 24.2 21% 7099	9102	1183	1157	1143	1187	1193	220	1150	1160	283		Co	
	9103	1187	1150	1140	1153	1167	220	1123	1133	273			
Dup 9102 21K 2 LiOH.	9104	1110	1223	1297	1250	1320	480	1243	1337	653	1200	1327	687
	9105	1117	1217	1300	1250	1347	477	1233	1367	613	1210	1327	680
Ra 1081 B a variation on 9102 [illegible] in filter press – 4.3 24.2 21K very low cut 6105	9106	980	1020	967	993	1007	263	Co					
	9107	983	1023	987	1010	1020	247						
Dup 9106 21K 2 LiOH.	9108	913	1000	1000	907	1027	493	Co					
	9109	880	993	1033	887	1000	517						
Edw'n 108– [illegible] 2 h in Conc HNO3 very acid [illegible] powdered 33% [illegible] – 4.4 23.9 21K 7375	9110	1017	1057	1023	1107	1127	250	1103	1120	300		Co	
	9111	1020	1080	1033	1120	1127	277	1113	1133	303			
Dup 9110 21K 2 LiOH.	9112	927	1210	1267	1233	1390	1083	1260	1383	983	1257	1357	99[illegible]
	9113	997	1227	1273	1227	1373	1060	1233	1400	853	1207	1360	[illegible]

Co

		Cold	25	50	100	100 ½	Hot	150	½	Hot	200	½	Hot
Edison 109 9117 2 h soaked 2 h Conc Bi NO3 Acetone – [illegible] KOH – No. [illegible] 4.2 21 K 23.4 7583	9114	1133	1193	1160	1207	1223	280	1190	1210	350			
	9115	1133	1190	1160	1223	1247	333	1223	1247	357			
Dup 9114 21 K 2 LiOH	9116	1157	1313	1320	1367	1487	890	1333	1473	1033	1410	1510	1107
	9117	1157	1300	1350	1350	1467	967	1360	1483	1037	1410	1533	1047
Edison 110 719 – 2 h – conc Bi NO3 acetone ½ hour then [illegible] drying [illegible] 21 K [illegible] 2319 21 K 7469	9118	1083	1117	1097	1147	1167	267	1133	1160	297			
	9119	1120	1167	1133	1160	1183	293	1163	1190	280			
Dup 9118 21 K 2 LiOH –	9120	1077	1237	1277	1223	1393	867	new Fe 1267	1373	873	1267	1370	1140
	9121	1113	1223	1297	1257	1393	797	old Fe 1310	1397	900	1307	1433	893
Edison 111 heated with Conc ammonia [illegible] free 9117 2 hours 4.4 24.3 21 K 7255	9122	1133	1103	1087	1123	1127	240	1113	1127	253			
	9123	1143	1090	1067	1110	1120	217	1113	1127	303			
Dup 9122 21 K 2 LiOH.	9124	1123	1217	1270	1200	1267	503	1227	1300	507	1210	1303	757
	9125	1113	1233	1283	1197	1290	497	1147	1330	497	1117	1310	773
Edison 112 heated ammonia Conc 708 Big Dim – 4.2 24.3 21 K 6952	9126	1150	1140	1123	1180	1197	307	1183	1207	380			
	9127	1167	1120	1107	1157	1170	270	1143	1163	323			
Dup 9126 21 K 2 LiOH –	9128	1077	1250	1317	1160	1250	493	1147	1300	523	1133	1257	777
	9129	1077	1247	1333	1187	1267	533	1173	1340	553	1147	1297	800
Edison 719 2 h 3 ft ½ ox acid treated [illegible] Tubes dipped BiCl3 acetone [illegible] ZnCl2 washed acetone [illegible] then 21 K [illegible] 21 K	9130	1197	1157	1147	1133	1143	200	1077	1087	200			
	9131	1200	1170	1127	1113	1120	187	1083	1093	187			
	9132	1187	1157	1100	1077	1083	177	1067	1073	177			
Dup 9130 21 K 1 gram LiOH.	9133	1133	1233		1267	1313	530	1213	1257	460			
	9134	1133	1233		1233	1290	570	1187	1257	490			
	9135	1133	1247		1233	1333	593	1063	1310	503			
~~Dup~~ 9130 21 K 2 LiOH.	9136	1133	24 1267		1260	1323	327	1253	1323	540	1183	1280 597	new Fe fast run + fast long Hot Last
	9137	1170	1330		1283	1360	377	1287	1420	560	1200	1343 610	
	9138	1163	1297		1280	1333	383	1277	1370	580	1173	1307 617	
					9136 37 38	250 1090 1027 1160	1247 1273 1293	537 527 617	annealed new Fe after 200 Hot Run –				

Unif

same Fe after 150 Run 9120 Fe

250 - 9145 1093 1260 560
46 1037 1247 570
47 1047 1247 507

			25	50
Dup 9130 Except 6 Rengo 21K	9139	1200	1157	1110
	9140	1187	1143	1110
	9141	1197	1160	1133
Dup 9130 Except 6 Rengo 1 gm LiOH + 21K?	9142	1167	1267	
	9143	1133	1240	
	9144	1127	1220	
Dup 9130 Except 6 Rengo 21K 2 LiOH —	9145	1190	1310	1310
	9146	1193	1330	1330
	9147	1200	1367	1367
Dup 9130 Except 8 Rengo 21K	9148	1233	1267	1183
	9149	1243	1330	1210
	9150	1217	1287	1167
Dup 9130 Except 8 Rengo 21K 1 gm LiOH —	9151	1193	1303	
	9152	1187	1260	
	9153	1193	1287	
Dup 9130 Except 8 Rengo 21K 2 LiOH	9154	1197		1333
	9155	1157		1290
	9156	1187		1337
Ra 1084A. Washed piece 24.1 4.4 21K	9157	1193		1223
	9158	1180		1197
7131	9159	1193		1227
Dup 9157 21K 2 LiOH	9160	1097		1210
	9161	1090		1210
	9162	1130		1247

From here until further notice
1e from 9162 flake 3 ½ ox. [illegible] but not acid treated —

100	100 ½	Hot	150	½	Hot	200	½	Hot	
1103	1107	180	1067	1073	213		Co		
1117	1127	183	1070	1080	263				
1143	1163	183	1093	1103	277				
1253	1317	593	1213	1280	553	1203	1247	467	Co
1240	1307	540	1200	1243	530	1177	1217	473	
1200	1307	513	1093	1250	493	1060	1237	467	
1260	1353	400	1287	1377	570	1177	1300	640	[illegible] 7½ in —
1280	1387	477	1307	1404	623	1253	1367	693	
1237	1410	487	1340	1460	627	1253	1383	680	
1157	1167	317	1177	1187	370	1123	1146	290	Co
1193	1210	243	1187	1197	313	1080	1087	297	
1150	1160	197	1143	1157	207	1030	1037	257	
1310	1393	600	1233	1307	497		Co		
1253	1343	507	1217	1263	430				
1277	1367	567	1400	1330	410				
1297	1409	500	1340	1427	630	1233	1347	667	[illegible] 7½ in
1223	1333	480	1277	1373	623	1187	1330	663	
1283	1467	584	1400	1320	730	1267	1477	710	
1217	1230	193	1217	1227	190		Co		
1193	1210	173	1187	1193	250				
1197	1207	190	1200	1210	217				
1183	1277	417	1200	1293	550		Co		
1217	1267	437	1237	1290	577				
1207	1297	457	1220	1300	553				
9154	250 1083	1273	523						
57	1090	1233	523						
56	1147	1373	540						

250 - 9172 1200 1323 433
73 1160 1290 467
74 1147 1280 453

			Will	5D
Ra 1084B percolation 4.2 24.2 21K 7075	9163	1143		1173
	9164	1150		1187
	9165	1150		1187
Dup 9163 21K 2 Li066.	9166	1050		1170
	9167	1067		1170
	9168	1067		1180
RA725A. percolated 17 wash Dried in Dryer 48 hours before percol otherwise same as 721 - green soft much fines 21K - 4.4 - acid washed 7354	9169	1187		1213
	9170	1200		1233
	9171	1207		1220
Dup 9169 21K 2 Li066. X	9172	1170		1333
	9173	1177		1313
	9174	1183		1313
Dup 9169 Except Electrolyzed flake not acid washed. 4.2 - 24 - flake same bulk as acid treated 7371	9175	1177 1220		1320 1243
	9176	1220		1247
	9177	1223		1243
Dup 9175 21K 2 Li066.	9178	1200		1343
	9179	1207		1367
	X 9180	1200		1353
RA 725B, 4.2 Electrolyzed 1/2 but not acid flake 24.2 g. 21K - greasy soft lumps & quantity fines 7422	9181	1240		1243
	9182	1213		1190
	9183	1227		1233
Dup 9181 21K 2 Li066	9184	1187		1317
	9185	1180		1307
	9186	1177		1320

250
9178 1183 1323 440
79 1133 1260 427
80 1110 1317 497

X grids holding pockets & Cubes hereafter plated & annealed Twice

100	100½	Hot	150	½	Hot	200			
1163	1180	173	1160	1177	153				
1180	1203	173	1183	1197	210				
1163	1180	227	1177	1193	273				
1173	1213	417	1190	1240	507	1110	1203	543	
1193	1240	400	1213	1257	490	1147	1233	500	
1193	1267	433	1220	1273	517	1147	1240	533	
1230	1247	177	1223	1240	267	1127	1140	230	
1210	1230	237	1220	1243	260	1103	1123	250	
1213	1230	197	1183	1200	267	1113	1130	203	
1333	1410	460	1343	1410	517	1273	1393	553	new 7½ in now
1327	1370	473	1316	1383	520	1240	1350	563	
1327	1393	283	1310	1373	513	1233	1347	547	
1233	1250	183	1198	1207	307				
1243	1263	190	1210	1220	310				
1250	1270	183	1213	1227	300				
1333	1400	507	1373	1423	533	1267	1417	563	Put new 7½ in now
1333	1413	453	1367	1423	523	1253	1373	520	
1333	1420	530	1367	1423	600	1287	1413	633	
1260	1277	183	1200	1217	307				
1207	1227	123	1137	1143	227				
1250	1270	173	1200	1210	260				
1290	1367	430	1310	1383	537	1233	1380	607	Put in new 7½ now
1313	1390	483	1353	1400	557	1270	1360	647	
1313	1390	420	1353	1433	533	1270	1403	710	
			250						
		9184	1147	1280	453				
		85	1200	1337	463				
		86	1123	1310	500				

		Calc	25	50	50 Hot	100	100½	Hot	150	½	Hot	200	½	Hot
Ra 725 C 4 f Electrolized not used — green soft & powdery -4.2 24.3 21K — 7551	9187	1240		1223		1260	1273	153	1220	1233	233	CO		
	9188	1243		1247		1240	1247	197	1240	1247	260			
	9189	1237		1267		1260	1270	193	1233	1247	237			
Dup 9187 21K Z Li 066.	9190	1213		1367		1373	1433	467	1387	1453	587	1313	1417	720
	9191	1190		1313		1317	1367	427	1343	1413	557	1233	1380	660
	9192	1203		1350		1333	1400	427	1367	1423	517	1283	1393	643
Ra 725 D flake 4.2 Electrolized not used & green powdery & quite some hard lumps 24.1 g — 21K 7669	9193	1223		1203		1260	1280	143	1180	1193	243	CO	Jam Fe pieces 250 no Gelts	
	9194	1203		1213		1253	1277	203	1197	1207	280			
	9195	1213		1247		1277	1300	203	1197	1207	247			
Dup 9193 21K Z Li 066 —	9196	1203		1313	370	1333	1400	420	1367	1423	453	1263	1390	580
	9197	1190		1320	400	1333	1420	427	1350	1400	393	1250	1360	563
	9198	1167		1300	343	1320	1383	450	1350	1390	443	1277	1360	523
Ra 725 E Electrolized 1/3 flakes not used 4.2 — green hard some hard lumps — 239 gm 21K 7813	9199	1197		1203	137	1130	1137	173		CO		Need Fe pieces ~~25~~ 250 Run no Gelts		
	9200	1173		1193	150	1113	1127	170						
	9201	1197		1233	160	1173	1180	220						
Dup 9199 21K Z Li 066.	9202	1193		1293	397	1333	1390	457	1357	1397	457	1277	1373	497
	9203	1203		1297	430	1300	1407	473	1327	1380	497	1213	1360	507
	9204	1197		1297	433	1333	1407	483	1357	1413	600	1250	1360	587
Ra 725 F. flake Electrolized not used — 4.2 - 24 — green lumpy & hard — 6.85 8??9	9205	1197		1167	140	1073	1080	200		CO		put new Fe in here 250 Run no Gelts		
	9206	1183		1173	150	1117	1123	160						
	9207	1150		1043	147	1000	1007	133						
Dup 9205 21K Z Li 066.	9208	1183		1300	443	1377	1453	483	1390	1433	630	1307	1400	653
	9209	1180		1280	363	1320	1400	480	1337	1390	530	1283	1370	587
	9210	1200		1323	360	1377	1453	397	1347	1397	430	1283	1397	683

put new Fe in now
250 Run no Gelts

			50	50 Hot	100	100½	Hot	150	½	Hot	200	½	Hot
RA 725 S.G. fl Electroded not need) Green bulky or hard to Crush 4.2 24 21K 6432	9211	1050	1090	150	1070	1080	167	Co					
	9212	1053	1057	170	1040	1053	147						
	9213	1077	1117	133	1077	1087	183						
Dup 9211 21K Z LiOH	9214	1033	1147	333	1113	1133		1020	1230	547	Co	See RA about this —	
	9215	1017	1133	360	1053	1190		973	1177	523			
	9216	1037	1190	407	1177	1253		1130	1247	523			
RA 1089 A — Electrode flake not need) — Coarse black Ni(OH)2 bulky 4.2 24.2 21K 6087	9217	980	1030	157	Co								
	9218	983	1040	143									
	9219	990	1033	153									
Dup 9217 21K Z LiOH	9220	963	993	423	Co								
	9221	947	983	453									
	9222	947	973	420									
RA 725 X Electrode fl not need) Hard Kernals 6.92 4.2 24.2 21K 7127	9223	1197	1207	153	1147	1153	167	Co			Split on ocean 1 Ring broken		
	9224	1167	1117	153	1040	1047	177						
	9225	1227	1240	153	1200	1207	233						
Dup 9223 21K Z LiOH.	9226	1247	1360	417	1333	1383	437	1380	1450	433	1343	1460	640
	9227	1193	1327	400	1333	1380	477	1373	1460	460	1290	1427	643
	9228	1240	1330	430	1330	1360	483	1367	1440	437	1327	1430	593
RA 1090 A Electrode fl not need) Coarse black Kernals 4.2 24.2 21K 6222	9229	1013	1067	160	Co	9226	250 rpm 1200	½ 1373	503	Co			
	9230	1017	1077	153		9227	917	1173	507				
	9231	1020	1070	160		9228	1223	1450 X	500 —	5 ons 1 Ring			
Dup 9229 21K Z LiOH.	9232	973	997	427	Co								
	9233	983	1023	463									
	9234	973	1023	460									

One more run gave
1393
1393
1367

			50	50 Hot	100	1/2	Hot	150	1/2	Hot	200	1/2	Hot	
RA 725 SH. fl Elect[illegible] not acid	9235	1223	1200	170	1130	1137	213							
green soft - 4.2 24-	9236	1220	1223	160	1183	1193	243		Co					
21K 7266	9237	1223	1227	157	1190	1200	267							
Dup 9235	9238	1190	1350	437	1267	1333	477	1217	1363	457	1100	1317	617	
	9239	1190	1303	427	1210	1310	453	1127	1303	420	1057	1300	613	Co
21K2 LiOH·	9240	1190	1333	447	1280	1313	420	1163	1300	417	1100	1317	583	
RA 1090B fl Elect not acid	9241	1093	1133	173										
green Coarse Kernels - 4.2 24-	9242	1087	1140	167										
21K 6506	9243	1097	1160	173										
Dup 9241	9244	1033	1117	403		Co								
21K 2 LiOH·	9245	1033	1113	450										
	9246	1033	1110	477										
RA 725 SI 24.2 4.2 fl Elect - not acid	9247	1213	1217	167	1177	1183	247							
Soft whitish lumps	9248	1190	1200	150	1133	1143	187		Co					
21K· 7429	9249	1180	1160	173	1100	1110	193							
Dup 9247	9250	1170	1307	447	1280	1337	487	1287	1380	410	1220	1427	633	
21K2 LiOH·	9251	1170	1303	483	1283	1333	453	1297	1373	413	1303	1427	647	Co
	9252	1183	1297	403	1267	1327	543	1267	1353	420	1243	1397	640	
RA 725 S[illegible] 4.2 24 fl Elect not acid	9253	1190	1217	87^5	1170	1177	223							
Soft Crushing green	9254	1190	1203	90	1097	1107	197		Co					
21K· 7368	9255	1197	1203	173	1110	1120	203							
Dup 9253	9256	1193	1333	370	1250	1340	533	1173	1353	443	1123	1397	587	[illegible]
21K 2 LiOH.	9257	1193	1327	387	1250	1307	500	1243	1363	450	1173	1393	590	
	9258	1193	1300	433	1250	1300	400	1250	1367	440	1173	1393	607	

250 - died no [illegible]

one more cold [illegible]

1300
1303
1300

			50	50 Hot	50 ½ V	100	½	Hot	150	½	Hot	200	½	Hot	
Ra 725 SK) fl Elent not acid 4.2 23.8 21K 7552	9259	1197	1250	193		1197	1203	233							Co
	9260	1220	1273	203		1237	1240	250							
	9261	1223	1257	200		1213	1223	240							
Decp 9259 21K 2 Li066	9262	1200	1377	527		1300	1357	463	1283	1407	490	1187	1403	627	Co
	9263	1217	1313	520		1267	1360	430	1193	1347	503	1047	1283	580	
	9264	1210	1377	500		1267	1353	393	1187	1327	463	1027	1267	567	
Ra 1088 A. 24.2 4.2 fl Elent not acid Hard lumps gritty green 21K 7164	9265	1220	1267	233		1247	1257	257	1180	1193	273				Co
	9266	1200	1247	183		1183	1190	260	157	1177	190				
	9267	1223	1267	197		1223	1227	283	1207	1223	227				
Decp 9265 21K 2 Li066	9268	1133	1230	477	1290	1350	1427	557	1323	1443	567	1127	1300	640	Co
	9269	1150	1227	457	1280	1297	1390	520	1277	1373	507	1143	1293	623	
	9270	1147	1247	493	1290	1393	1457	607	1290	1410	553	1113	1293	633	
Ra 1086 A.) 4.2 24.3 fl Elent not acid green hard whitish lumps 21K 8041	9271	1237	1297	193		1250	1257	287	1253	1273	253				O
	9272	1223	1267	177		1217	1223	240	1203	1220	240				
	9273	1223	1277	200		1267	1273	220	1250	1263	263				
Decp 9271 21K 2 Li066	9274	1167	1290	530	1367	1400	1480	603	1267	1407	570	1113	1240	650	1 Ring Swelled 1 Ring 3 Ring
	9275	1160	1263	517	1333	1373	1450	550	1330	1447	560	1190	1360	570	Co
	9276	1160	1243	463	1327	1350	1483	573	1323	1410	570	1233	1393	670	
Ra 1088 B. 24. 4.2 fl Elent not acid — Hard lumps. 21K 7009	9277	1183	1243	220		1220	1233	293	1183	1200	283				O
	9278	1183	1233	163		1197	1210	250	1167	1187	207				
	9279	1193	1247	207		1220	1233	300	1183	1197	247				
Decp 9277 21K 2 Li066	9280	1107	1200	447	1243	1313	1367	583	1233	1333	547	1133	1333	620	Bul S 1 Ring
	9281	1107	1193	440	1237	1230	1310	523	1083	1247	547	893	1083	593	Co
	9282	1113	1220	463	1267	1327	1393	537	1233	1380	560	1097	1223	633	

11

			50	50 Hot	50 ½ V	100	½	Hot	150	½	Hot			
RA 1086B Elut not rec'd ½ f 4.2 24–	9283	1193	1270	177	1290	1223	1230	310	1233	1250	197			
	9284	1197	1273	250	1293	1257	1270	327	1237	1260	223			
21K. 7965	9285	1213	1260	220	1277	1220	1230	307	1237	1253	200	200		
Dup 9283	9286	1140	1243	413	1317	1330	1393	447	1363	1400	483	1230×	1360	583
21K 2 (10ff.	9287	1157	1267	427	1333	1367	1433	490	1217×	~~1363~~	490	1097 ×Sol cut	1240	640
	9288	1163	1267	463	1350	1360	1463	467	1177	1347	500	1047×	1180	610
RA 1089B Elut not rec'd ½ 4.2 24.2	9289	990	1017	197	1030				1267			1 Ring 2 Ring		
	9290	997	1017	190	1030									
21K 6034	9291	1017	1047	163	1057							+ Ring –		
Dup 9289	9292	923	960	410	987									
21K 2 (10ff.	9293	917	973	373	997									
	9294	930	980	300	1010									
RA 725 SM – Elut not rec'd ½ f 4.2 23.9	9295	1250	1250	157	1260	1157	1163	193						
	9296	1250	1260	173	1267	1217	1223	183				Swell 1 Ring		
21K – 7477	9297	1240	1230	190	1237	1177	1183	207				200		
Dup 9295	9298	1227	1300	370	1347	1317	1380	453	1227×	1340	483	1127×	1280	610
21K 2 (10ff –	9299	1240	1283	400	1327	1333	1403	450	1267	1400	483	1193	1333	590
	9300	1240	1300	473	1350	1347	1437	547	1230	1420	520	1117	1323	590
RA 725 Y – 4.2 24 – Elut not rec'd ½ f	9301	1223	1243	197	1253	1210	1220	197				Bands 1 Ring		
	9302	1227	1250	170	1260	1220	1227	197						
21K 8100	9303	1237	1257	207	1267	1220	1227	217						
Dup 9301	9304	1253	1357	493	1397	1380	1447	547	1177×	1330	523	Swelled 1 Ring		
21K 2 (10ff.	9305	1260	1347	453	1383	1400	1487	627	1257×	1377	559	Swelled		
	9306	1267	1357	408	1400	1370	1443	597	1067×	1237	470	Swelled 1 R		
		1260	1354			1383			1167					

			50	~~50~~Hot	100	1/2	Hot	150	1/2	Hot
Ra 1092 A— 4 Elutrated not acid f—1/2 4.2 2.39 21K 6714	9307	1113	1163 1163	297						
	9308	1123	1177 1193	263						
	9309	1127	1163 1183	247						
Dup 9307 21K 2 LiOH	9310	1020	1103 1127	317						
	9311	1017	1103 1133	340						
	9312	1000	1097 1127	303						
Ra 1092 B Elut f 1/2 not acid 24. 4.2 6637 21K	9313	1113	1150 1173	300						
	9314	1117	1173 1193	240						
	9315	1113	1177 1197	257						
Dup 9313 21 K 2 LiOH,	9316	1017	1097 1117	293						
	9317	983	1080 1107	327						
	9318	987	1057 1077	300						
Ra 1082 A, 4.2 Elutes not acid 24. [illegible] green — 21K 7807	9319	1167	1157 1173	173						
	9320	1157	1130 1147	180						
	9321	1177	1170 1183	167						
Dup 9319 21 K 2 LiOH — slightly spongy —	9322	1123	1250 1290	357						
	9323	1090	1183 1243	337						
	9324	1090	1200 1247	353						
Ra 1082 B- 4.2 f Elutes not acid 24.1 tubes slightly spongy 21K 7792	9325	1177	1180 1190	177	1167	1173	217			
	9326	1160	1130 1147	163	1093	1103	197			
	9327	1183	1173 1180	150	1160	1167	177			
Dup 9325 21K 2 LiOH	9328	1127	1250 1293	367	1207	1250	407	1223	1283	600
	9329	1110	1200 1260	333	187	1227	393	1217	1263	557
	9330	1110	1220 1270	327	1187	1233	463	1190	1267	600

Co

Co

Co

1¼ turn tubes instead 1½
slightly opening

			50	50½	50 Hot	100	100½	Hot				
Ra 1093A. 4.3 f Elut not acid 24.12	9331	1127	1113	1123	230	1063	1080	267				Co
21 6960	9332	1123	1077	1083	230	1060	1067	220				
~~2D~~ Dup 9331	9333	1007	1043	1073	300	Co						
21K 2 LiOH.	9334	987	1037	1067	307							
	9335	1143	1177	1190	303	1100	1107	333				Co
	9336	1153	1150	1160	257	1103	1110	280				
	9337	977	1033	1057	320	Co						
	9338	980	1037	1067	297							
Ra 1094 A ½ f Elut not acid	9339	1117	1073	1080	210	1000	1010	260				Co
4.3 f 24.2 g 21	9340	1117	1047	1060	217	953	963	230				
Dup 9339	9341	1023	1063	1093	290	Co						
21K 2LiOH.	9342	1023	1047	1073	320							
Ra 1094B 4.2 f Elut not acid 23.9	9343	1070	980	983	200	1000	1007	200				Co
21K	9344	1067	953	960	210	960	947	200				
Dup 9343	9345	1000	990	1020	297	Co						
21K 2 LiOH.	9346	1000	983	1010	293							
Ra 1095A. 4.3 f Elut not acid 21K	9347	1140	927	933	200	973	983	193				Co
	9348	1150	927	933	217	1027	1033	210				
Dup 9347	9349	1053	1030	1053	320	Co						
21K 2LiOH,	9350	1053	1037	1093	323							
	9351	1123	947	953	180	1007	1017	193				Co
	9352	1130	873	880	217	1017	1027	227				
	9353	1020	1000	1020	320	Co						
	9354	1020	1057	1073	330							
71 g. 2 li glass tubes for No 3 [illegible] [illegible] used in [illegible] 10231. 4.3 - 24.0 4 [illegible] 21 41.449	9355		1190	1200	207	1210	1217	267	1113	1123	303	Co
	9356		1170	1180	207	1187	1197	267	1067	1073	297	

Curious for 719 —

		Cold	50	50 ½	Hot	100	½	Hot	150	½	Hot	200	½	Hot	
Dup 9355 21K2 LiOH.	9357		1287	1313	287	1313	1363	703	1357	1413	703	1230	1340	637	a[illegible]
	9358		1287	1307	280	1303	1360	683	1347	1413	643	1260	1367	587	
Ra 718 ½ w not fil [illegible] heat Dup of 8172 — green bulky f 4.2 24. spray 21K 7212	9359	1247	1283	1293	280	1233	1287	357							Co
	9360	1260	1250	1260	207	1237	1250	277							
Dup 9359 21K2 LiOH	9361	1173	1317	1360	293	1287	1347	680	1247	1347	680	960	1090	577	Co
	9362	1167	1317	1340	287	1263	1323	673	1213	1337	670	977	1123	583	
Ra 1096A. 4.2 Elec f not [illegible] 4 [illegible] 24.1 21K 7096	9363	1187	827	833	187	Co									
	9364	1183	940	943	173										
Dup 9363 21K2 LiOH.	9365	1040	1117	1133	330	Co									
	9366	1043	1103	1120	310										
Ra 1096B- 4.2 24.3. 21K 7023	9367	1133	913	920	183	Co									
	9368	1140	907	913	180										
Dup 9367 21K2 LiOH	9369	1033	1103	1120	290	Co									
	9370	1043	1143	1167	287										
Ra 1100A. 24- 4.2 ½ Elec not [illegible] 4 [illegible] 21K	9371	1193	1273	1283	200	1260	1273	244	1183	1200	280				Co
	9372	1210	1287	1300	220	1277	1290	233	1203	1220	280				
Dup 9371. 21K2 LiOH.	9373	1187	1363	1392	250	1330	1417	597	1343	1417	670	1073	1260	557	Co
	9374	1187	1347	1370	263	1333	1377	527	1330	1380	667	1100	1283	567	
Ra 1100B 21K- 4.2 24.2 7830	9375	1183	1277	1290	203	S 1303	1320	167	1193	1207	300				Co Swelled 1 R[illegible]
	9376	1183	1273	1283	217	1257	1267	240	1177	1190	270				
Dup 9375 21K2 LiOH,	9377	1180	1360	1387	280	1383	1417	487	1333	1377	670	1100	1227	560	Co
	9378	1180	1357	1390	323	1360	1400	483	1333	1387	627	1150	1273	580	
719. 2. h greenlayer NO4 flake 84" thread not purified — 21K 7557	9379	1206	1210	1217	203	1217	1237	250	1120	1143	337				Co
	9380	1237	1267	1273	243	1260	1283	280	1153	1197	377				
Dup 9379 21K2 LiOH.	9381	1133	1277	1302	333	1173	1227	560	1043	1137	620	787	897	553	Co
	9382	1117	1290	1317	267	1200	1263	610	1043	1160	577	860	940	527	

+6 Rings [illegible]

			50	50 ½	Hot	100	½	Hot	150	½	Hot				
Ra 719-2 h-g [illegible] Not 647 OX. CP Hydrog by Dalley 4.4 - 23.8 – flake heavy again – not separated good 6 Rings 21K 7708	9383	1273	1133	1183	250	1073	1120	310							Co
	9384	1267	1213	1243	260	1120	1173	320							
Dup 9383 21K 2 LiOH.	9385	1137	1067	1160	413	990	1020	410							Co Note heavy flake
	9386	1130	1060	1133	453	977	987	423							
Ra 725 O, 4 Elut not acid- 4.2 24.1 21K 7618	9387	1260	1257	1270	243	1287	1293	327	1223	1233	327				Co
	9388	1243	1253	1267	207	1237	1243	283	1193	1200	283				
Dup 9387 21K 2 LiOH.	9389	1233	1260	1283	490	1327	1397	497	1267	1403	580				Changed ½ 200 Rm no better
	9390	1247	1327	1333	480	1330	1397	540	1267	1417	617				
Ra 1101 A, Elut not acid f - 4.2. 24. 21K 7127	9391	1177	1160	1193	233	1157	1200	227	1100	1127	273				Co
	9392	1243	1273	1287	207	1273	1287	227	1163	1170	290				200#
Dup 9391 21K 2 LiOH	9393	1207	1310	1327	467	1340	1430	453	1363	1417	627	1067	1300	620	
	9394	1207	1303	1330	430	1380	1450	453	1340	1433	617	1133	1397	667 Solenoid	
Ra 1101 B- 4.3 24 21K 7248	9395	1190	1130	1133	190	1223	1237	157	1100	1107	244				Co
	9396	1193	1207	1220	203	1220	1233	200	1157	1167	247				
Dup 9395 21K. 2 LiOH.	9397	1140	1207	1227	333	1287	1333	407	1253	1327	523				Co
	9398	1160	1260	1280	363	1357	1397	467	1330	1393	580				
Ra 1102 A. 4.2 24 21K 7099	9399	1237	1240	1253	250	1237	1253	257	1153	1180	310				Co
	9400	1250	1233	1243	227	1233	1247	267	1173	1190	287				
Dup 9399 21K 2 LiOH.	9401	1200	1293	1317	367	1283	1393	503	1090	1303	590				Co
	9402	1193	1303	1310	363	1263	1430	503	1147	1317	617				
Ra 1102 B 4.3 24.2 21K 7126	9403	1200	1197	1203	200	1190	1197	240	1123	1130	267				Co
	9404	1210	1193	1200	177	1190	1197	237	1100	1107	257				
Dup 9403 21K 2 LiOH.	9405	1160	1277	1290	333	1350	1390	477	1253	1353	600				Co
	9406	1160	1257	1277	343	1327	1377	423	1217	1317	580				

6 Rings [illegible]

			50	50½	Hot	100	½	Hot	150	½	Hot
Ra 1103A. 4.2 24.1 21K 7122	9407	1223	1227	1233	197	1223	1237	283	1167	1183	310
	9408	1240	1223	1233	173	1207	1223	280	1127	1140	283
Dup 9407 21K 2 LiOH.	9409	1210	1320	1347	420	1273	1407	507	1067	1277	593
	9410	1210	1307	1317	423	1290	1407	483	1097	1280	560
Ra 1103B 4.3 24. 21K 7123	9411	1183	1153	1160	173	1153	1157	233	1067	1073	244
	9412	1170	1167	1173	173	1183	1190	207	1083	1087	237
Dup 9411 21K 2 LiOH.	9413	1157	1260	1263	457	1313	1370	487	1217	1380	597
	9414	1157	1327	1337	590	1417	1457	480	1330	1433	613
Ra 718 Sample 6 — 4.3 24 — f Elect not mixed 6 Rings 21K 7484	9415	1237	1223	1230	290	1200	1210	210			
	9416	1240	1217	1220	257	1200	1210	187			
Dup 9415 21K 2 LiOH.	9417	1217	1367	1383	547	1250	1383	473	1080	1277	550
	9418	1217	1343	1367	493	1290	1390	517	1100	1307	587
Ra 718 No 6 — Greenly, 8910 flake — 4.2 24 6 Rings 21K 7469	9419	1273	1197	1233	303	857	1023	233			
	9420	1267	1123	1217	287	897	1023	243			
Dup 9421 21K 2 LiOH.	9421	1150	1167	1267	430	677	807	413			
	9422	1193	1057	1197	400	783	890	437			
Ra 721 sample No 8 — samples 1,2,3 4,4,7 mixed + averaged 4.2 f Elect not mixed) 23.8 green 21K	9423	1220	1233	1243	190	1197	1207	223			
	9424	1237	1307	1320	233	1263	1277	240			
Dup 9423 21K 2 LiOH.	9425	1247	1357	1397	343	1257	1390	463	1103	1267	537
	9426	1267	1357	1377	253	1290	1377	437	1183	1297	537

Cc What are they ?

Co

IV ~~Hot~~

Σ	100
4499	1725
4500	1120
4501	1515
4504	1120
4505	1725
4506	1253

A

Annex

Co

Co Notice bad flake or green

Co

Badflake

Co

Co

		Cold	50	1/2	Hot	100	1/2	Hot				
greenleys No 9 flake 1/2 Ra 718 - Sample No 6 flake boring 4.3 24. 21KoH. 7396 6 Rings	9427 9428	1187 1210	953 1017	1017 1083	217 190							Co
Dup 9427 21K2 LiOH.	9429 9430	1023 977	733 650	883 787	333 300							Co — Rotten flake its full of full squares not separated — a word of all the flakes No 24
greenleys No 11 12+13 f Ra 718 - same green no wood in 9359 4.4 24.1 6 Rings same flake bulky and treated 21K	9431 9432	1297 1280	1257 1230	1267 1240	197 193	1180 1160	1207 1173	250 233				Co
Dup 9431 21K2 LiOH.	9433 9434	1217 1230	1187 1237	1260 1310	343 400	1017 1120	1183 1223	563 603				Co ~~Wide~~ note flake
Ra 1105A. Elect not wood flake 6 Rings 4.2 23.9 21K	9435 9436	1227 1233	1240 1217	1250 1223	240 237	1153 1187	1167 1197	240 242				Co
Dup 9435 21K2 LiOH	9437 9438	1197 1197	1297 1277	1323 1297	503 463	1327 1300	1377 1350	613 587	1167 1143	1307 1307	533 520	new 1/2 now — annex
Ra 1105 B Elect not wood 6 Rings — 4.3 24.1 ? 21K	9439 9440	1200 1190	1200 1130	1210 1137	217 220	1147 1123	1160 1130	233 220		O		
Dup 9439 21K2 LiOH —	9441 9442	1180 1170	1267 1240	1293 1263	423 370	1317 1263	1350 1310	547 507	1263 1200	1390 1297	533 513	Co

all 6 Rings

			50	1/2	Hot	100	1/2	Hot				
Ra 718 Sample No 9 greasy Elect not rec'd flake 6 Rings 4.2 24.1 21K	9443	1257	1210	1223	207	1107	1117	263				Co
	9444	1263	1243	1253	183	1157	1170	270				
Dup 9443 21K 2 coats	9445	1233	1263	1320	360	1097	1243	553				Co [illegible] Co flake
	9446	1243	1290	1343	317	1103	1253	587				
Ra 726 ~~tpe~~ Elect not rec'd) 6 Rings 7508 21K	9447	1100	1140	1150	207	1067	1083	253				Co
	9448	1140	1170	1173	227	1100	1110	213				
Dup 9447 21K 2 coats.	9449	1190	1243	1293	517	1277	1343	500	1200	1326	490	Co
	9450	1183	1307	1343	593	1330	1377	547	1260	1367	583	
greasy 16 f 4. 23.9 Ra 718 6 Rings – 21K	9500	1280	1240	1253	213	1123	1147	337				Co
	9501	1280	1240	1253	213	1110	1147	343				
Dup 9500 21K 2 coats.	9502	1160	1267	1343	613	1023	1160	547				Bad flake Co
	9503	1153	1233	1300	530	967	1113	533				
Ra 719-2 h drawn Heated in glass flask – Castor oil to 400 Fahr for 20 min – 4.2 Elect not rec'd f 23.8 21K	9504	1093	1163	1163	190	1050	1053	230				Co
	9505	1127	1123	1133	183	1033	1040	253				
Dup 9504 21K 2 coats –	9506	1117	1240	1260	393	1223	1297	527	1200	1287	650	Co
	9507	1130	1250	1267	400	1243	1290	553	1200	1317	683	

6 Rings —

			50	1/2	Hof	100	1/2	Hof	150	1/2	Hof
719-2-h — Heated in flask in Castor oil to 450 Fahr 20 minutes — 4.2 Elect 24.2 21K 7084	9508	1093	1157	1167	203	1057	1063	277		0	
	9509	1047	1080	1083	180	980	983	250			
Dup 9508 21K2 LiOH	9510	1093	1250	1263	420	1240	1287	593	1207	1307	680
	9511	1053	1210	1227	413	1183	1237	613	1177	1280	6.63
719-2 h- Heated in flask in Castor oil 212 Fahr 2 min 4.2 Elect not acid 24 — 21K 7479	9512	1167	1157	1163	173	1030	1033	253		0	
	9513	1183	1143	1150	170	1060	1063	243			
Dup 9512 21K2 LiOH —	9514	1130	1267	1300	433	1223	1293	600	1103	1263	633
	9515	1130	1253	1277	430	1213	1297	587	1090	1263	610
719-2-h Heated in flask Castor oil 300 Fahr 20 minutes 4.2 Elect 23.8 21K	9516	1123	1107	1117	147	967	973	237		0	
	9517	1187	1143	1150	147	1053	1057	250			
Dup 9516 21K2 LiOH —	9518	1167	1273	1300	483	1233	1330	650	1050	1300	603
	9519	1167	1287	1.310	527	1173	1293	677	920	1140	547
Soaked 10 min Calcium Chl (tubes soaked) not dried — then soaked Sodium Metaphos. soaked out Twice in H_2O then KOH 4.2 24 6 Rings 719 — 21K2 LiOH 7707	9520	1183	1287	1323	580	1267	1363	743	1097	1307	617
	9521	1173	1293	1340	560	1293	1373	773	1163	1387	610
Dup Soaked CaCl. 10 min not dried — then soak 10 min Orthophosphate Na soaked H_2O + H_2O + 1% KOH 21K2 LiOH tube soaked	9522	1150	1310	1363	567	1240	1333	763	1,050	1283	603
	9523	1173	1317	1367	537	1260	1373	753	1133	1383	610

Tubes soaked

			50	½	Hat	100	½	Hop	150	½	Hop	200	½	H	
719-2 h soaked K fluoride 10 min not dried then 10 min Magnesium Chl 21K2L10ff.	9524 9525	1117 1090	1210 1160	1233 1197		1133 1087	1197 1157	627 573		Co					
~~5b~~ 719-2 soaked 10 min K fluoride not dried then 10 min Barium Chl 21K2L10ff. 7614	9526 9527	1160 1133	1273 1267	1300 1290	487 493	1173 1187	1267 1270	640 613		Co					
719-2-h Soak 10 min K fluoride not dried then 10 min Strontium Chl 21K2L10ff. 7636	9528 9529	1157 1190	1283 1283	1317 1313	527 533	1173 1200	1287 1280	620 580		Co					
719-2 h Soak 10 min Calcium Chl not dried then 10 min in Trisodic phosphate normal ortho 21K2L10ff. 7629	9530 9531	1160 1177	1253 1283	1293 1330	633 653	1287 1287	1340 1363	683 703	1277 1240	1417 1400	617 673	1193 1117	1400 1350	690 673	Annex
719-2 h Soak 10 min K fluoride then 10 min Calcium Chl - 21K2L10ff. 7629	9532 9533	1180 1177	1303 1303	1330 1327	563 563	1190 1180	1277 1300	610 610		Co					
719 - Soak 10 min Pot Fluoride then dried - then 10 min $BaCl_2$ 4.2 24 Element not [illegible] 21K2L10ff. 7603	9534 9535	17 Runs 1180 1073	1313 1213	1337 1243	550 450	1373 1277	1423 1313	720 590	1280 1227	1377 1287	667 613	1060 1098	1213 1213	573 523	Annex
719 10 min in K Fluoride dried then 10 min Calcium Cl 4.2 24 21K2L10ff. 7613	9536 9537	1093 1110	1267 1273	1293 1300	[illegible] [illegible]	1243 1230	1343 1313	893 768	1033 1000	1257 1223	540 530	Co			
719 10 min K Fluoride dried — 10 min $MgCl_2$ 21K2L10ff. 7709	9538 9539	1067 1067	1200 1183	1230 1237	[illegible] 377	1187 1147	1253 1243	550 537		Co					

Split
Split

			50	1/2	Hot	100	1/2	Hot	150	1/2	Hot	200	1/2	H
719 2 h — 10 min K Fluoride dried — 10 min Strontia Chl. 4.2 24 — 21 K 2 LiOH 7710	9540	1107	1217	1250	[illegible]	1260	1343	577	1133	1240	437	Co		
	9541	1133	1227	1257	[illegible]	1260	1337	650	1143	1257	493			
719-2 h · 10 min Trisodic Phosphate Sat sol normal salt ortho dried — then soak 10 min SrCl2 4.2 23.9 21 K 2 LiOH. 7716	9542	1227	1240	1287	467	1237	1293	533	1250	1307	510	Co		
	9543	1253	1287	1333	470	1283	1347	573	1277	1367	530			
719-2-h 10 min Trisodic phos ortho normal - dried - 10 min CaCl2 4.2 23.9 21 K 2 LiOH 7721	9544	973	1117 X	1183	507	Co								
	9545	1000	1160 X	1220	483									
719 — 10 min Trisodic phos ortho normal dried — then 10 min MgCl2 4.2 23.9 — 21 K 2 LiOH. 7751	9546	987	1103	1130	327	Co								
	9547	973	1083	1113	300									
719 10 min Trisodic phos ortho normal dried — 10 min BaCl2 · 4.2 23.9 21 K 2 LiOH. 7710	9548	1230	1267	1293	403	1273	1307	580	1327	1370	540	1267	1353	600
	9549	1233	1280	1307	427	1297	1333	563	1307	1363	540	1240	1313	567
719 10 min Metaphosphate Soda dried — 10 min BaCl2 4.2 23.9 — 21 K 2 LiOH. 7699	9550	1217	1243	1267	473	1233	1290	543	1250	1303	527	1183	1267	583
	9551	1177	1177	1210	567	1213	1267	537	1233	1303	557	1167	1293	570
719 — 10 min Metaphos Sodium dried — 10 min MgCl2 4.2 23.9 7683 21 K 2 LiOH	9552	817	977	1007	263	Co								
	9553	860	1030	1053	283									
719 — 10 min Metaphos Na dried — 10 min CaCl2 4.2 23.9 21 K 2 LiOH. 7694	9554	893	1087 X	1133	417	Co								
	9555	877	1043 X	1093	440									

Son S 3 R-p
Son S 1

6 Rings

			50	½	Hot	100	½	Hot	
719-2 — 10 mm Metaphos Na - dried — 10 mm SrCl$_2$ 4.2 23.9 - 21K2 LiOH · 7633	9556	867	750	983	41[illegible]				Co
	9557	1067	1053	1217	49[illegible]				
RA 1104A — NO$_3$ greenly flake 6 Rings 4.2 23.9 green very bulky 21K 7238	9558	700	800	807	117				Co NECl$_2$ bad green ~~of flake~~ or No Look
	9559	797	860	873	133				
Dup 9558 21K2 LiOH ·	9560	1133	1007	1200	[illegible]				Co Must be bad stuff ie green flake OK
	9561	1063	993	1190	52				
719-2 — greenly NO$_3$ f — 4.2 23.9 6 Rings : 10 mm pyrophos Na dried — 10 mm MgCl$_2$ 21K2 LiOH · 4670	9562	1067	1147	1180	4[illegible]				Co
	9563	1063	1160	1173	41[illegible]				
719 — 10 mm Pyrophos Na - dried — 10 mm BaCl$_2$ 4.2 23.9 21K2 LiOH. 7711	9564	1137	1157	1180	[illegible]				Co
	9565	1100	1120	1157	[illegible]				
719 — 10 mm Pyrophos Na dried — 10 mm CaCl$_2$ - 4.2 23.9 21K2 LiOH · 7709	9566	1083	1147	1213	5[illegible]				Co
	9567	993	1100	1177	5[illegible]				
719 comm - Pyrophos Na dried - 10 mm SrCl$_2$ 4.2 23.9 21K2 LiOH · 7660	9568	850	900	950	[illegible]	1000	1053	370	Co
	9569	1060	1023	1083	[illegible]	1067	1133	433	
725 RA ~~[illegible]~~ not percolated put in flask about up to 300 F in Castor oil — 6 hours — washed free of sulphate — it blackened a little, black went CaCl$_2$ & washed out , 7.00 4.3 24 21KOH, 8273	9570	940	950	953	197				Co
	9571	877	900	903	195				
	9572	927	933	914	190				

						100	½	Hot	150	½	Hot	
Dup 9570	9573	1190	1267	1297	500	1253	1313	613	1160	1227	430	Co
	9574	1180	1260	1283	537	1240	1300	573	1133	1217	420	
21 K 2 L066	9575	1173	1247	1260	493	1240	1287	543	1133	1207	412	
RA427 - not percolated - put in flask in Crisco oil bath up to 212 for 3½ hours washed free sulfate - 4.3 24 - greenly no 3 fl	9576	1167	1180	1187	203							Co
	9577	1157	1093	1137	177							
21K	9578	1173	1137	1147	173							
[illegible] Dup 9576	9579	1213	1350	1380	563	1333	1417	600	1133	1317		Co
	9580	1190	1347	1357	560	1360	1433	620	1200	1383		
21 K 2 L066 -	9581	1210	1333	1357	453	1363	1427	650	1200	1350		
4499 A. iron now put with 2 Bismuth [illegible] tubes July 7 1972 21 K 2 L066.	9582											
719-2 h - greenly 18 nif 4.2 23.9	9583	1243	1197	1217	203							Co
	9584	1220	1130	1140	183							
21K 7.621	9585	1213	1147	1160	147							
Dup 9583	9586	1133	1067	1183	343	903	997	440				Bad flake again Co
	9587	1117	1097	1177	343	910	987	447				
21 K 2 L066	9588	1097	1100	1187	377	867	983	473				

6 Amp

			50	½	Hot	100	½	Hot	150	½	Hot	200	½	H
tube dipped RA 723 ½ w. not fullered Percolated same as used in 9010 Dipped XCP aniline [illegible] dried – boiled 2.1% KOH. washed dried – 4.2 23.8 21K2 {10H. 7691	9589	1133	1280	1300	463	1323	1367	667	1247	1327	780	1100	1283	633
	9590	1120	1323	1353	493	1393	1433	710	1230	1373	797	977	1183	650
719-2 h. greenly 19.20 f 4.1 23.8	9591	1263	1197	1210	203	Co					550	540		
											9598	1143	1320	1067
	9592	1240	1110	1147	183						9599	1180	1350	1120
21K 7611											9600	1137	1303	1077
Dup 9591 SS	9593	953	843	893	460	Co	Bad	flake	I	guess				
21K2 {10H. 1.1	9594	957	850	987	493							400		
RA 723 ½ w not fullered – same as 9010 – percolation less heat, 443 greenly f	9595	1250	1120	1130	777	1193	1207	657	Co		9598	1283	1413	1083
4.2 23.7 77 87	9596	1263	1140	1156	767	1173	1190	730			9599	1307	1423	1137
21K RUN COLD	9597	1173	1003	1020	667	1050	1063	600			9600	1277	1397	1130
Dup 9595														Cold
RUN COLD	9598	1233	1287	1303	1003	1257	1287	1037	1303	1360	1117	1287	1380	1140
21K2 {10H.	9599	1233	1290	1310	1037	1277	1303	1063	1317	1370	1133	1300	1390	1160
	9600	1243	1327	1350	1040	1307	1340	1017	1353	1403	1163	1330	1420	1183
RA 1117 = 443 greenly f 4.3 24.1 –								250R	½	#	300			
	9601	1167	1173	1180	187	Co		1243	1373	1170	1280	1377	1117	
Very light colored green –	9602	1177	1147	1153	187			1270	1397	1197	1270	1403	1153	
21K 6.61 7802	9603	1183	1130	1133	197			1228	1413	1203	1270	1400	1150	
Dup 9601	9604	1163	1290	1317	557	1313	1373	730	1153	1327	657	950	1150	580
	9605	1170	1280	1307	517	1293	1343	650	1170	1293	683	1027	1183	580
21K2 {10H.	9606	1153	1277	1303	487	1313	1380	670	1170	1330	700	1013	1190	613
							350				450			
						9598	1233	1387	1120	9598	1177	1347	1077	
						99	1277	1417	1153	99	1210	1367	1117	
					7	9600	1260	1373	1143	960	1180	1330	1100	

6 Rmp

		Cold	50	1/2	Hot	100	1/2	Hot	150	1/2	Hot	200	1/2	Hot
23.9 4.3 – RA 725 or 727 – pectin [illegible] 4 [illegible] heated [illegible] was not percolated but had all the NaOH + Sulphur – then [illegible] 10.29 [illegible] 423 [illegible] 21K2 L10H 11959 – 5.8 1.1	9607 9608		34Hr 580 570	633 613					250					
RA 727 Drain 2 hours Greeley No 3 4.3 24.1 21K 7914	9609 9610	1197 1220	1180 1173	1187 1177	157 160			9611 9612	97 900	1120 1153	693 597			
Dup 9609 21K2 L10H	9611 9612	1230 1230	1330 1357	1363 1387	503 540	1283 1360	1387 1440	697 740	1047 1067	1243 1267	667 700	893 843	1047 980	563 600
RA 727 – Drain 14 hours No 3 Greeley – 4.1 24 21K 7914	9613 9614	1197 1200	1157 1140	1167 1147	150 170									
Dup 9613 21K2 L10H.	9615 9616	1227 1227	1363 1327	1393 1353	517 450	1363 1350	1453 1430	717 667	1120 1167	1330 1363	713 633	870 940	1123 1180	557 560
RA 1118 Greeley No 3 – 4.3 24.2 21K	9617 9618	1200 1200	1083 1147	1087 1153	183 153									
Dup 9617 21K2 L10H –	9619 9620	1163 1137	1233 1227	1260 1247	427 447	1233 1217	1287 1267	670 690	1023 1023	1243 1167	690 663	867 867	1070 1000	667 690

			50	½	H of	100	½	H of	150	½	H	200	½	H of
719-2 – [illegible] No 21 4.1 24 21K 7679	9621	1220	1067	1073	270	Co		give to Ellison				—		
	9622	1197	1067	1083	273									
Dep 9621 21K2LiOH –	9623	1200	1250	1287	503	1133	1250	553	997	1167	500		O	
	9624	1200	1277	1300	550	1200	1287	523	1063	1267	507			
Ra 728 duplicating 723 – 6 Rings, 4.3 24.1 violet flake – 21KOH 2LiOH; 8120 2 equiv 6.9 on grain	9625	1220	1367	1377	510	1277	1363	533	1067	1283	513			
	9626	1273	1333	1367	523	1253	1317	473	1157	1283	467			O
	9627	1283	1343	1363	603	1200	1303	490	1017	1197	523			
Ra 728 Dup 723. 4.3 24.1 green lighter color than 723 but same bulk – 6 Rings – 3 [illegible] flake – RUNCOLD 6,900 8101	9628	1290	1360	1377	1057				1340	1410	1127	1343	1420	1150
	9629	1287	1380	1393	1077				1380	1450	1148	1343	1466	1163
	9630	1290	1353	1370	1047				1367	1437	1137	1340	1463	1147
Ra 1119 3 granules 4.3 24. Green soft crumbling slightly bulky 21K2LiOH – 7290	9631	1017	1100	1113	500				250	½				
	9632	1007	1080	1100	490		Co		1233	1383	1163			
	9633	1017	1127	1140	490				1250	1407	1170			
									1250	1430	1163			
									300 Run			400		
Dep 9631 RunCold 21K2LiOH.	9634	1000	1120	1137	950	Co		9628	1207	1363	1100	1223	1367	953
	9635	1007	1110	1127	940			9629	1193	1363	1090	1213	1363	833
	9636	990	1113	1127	943			9630	1217	1393	1090	1233	1397	977
Ra 723 same as used in 9012 Dipped XCP BiCl3 acetone boil KOH. 3 granules 4.3 24. 21K2LiOH. 7769	9637	1133	1290	1303	517	1260	1260	640			9628	450 1087	1270	940
	9638	1127	1290	1310	510	1193	1257	737			9629	1080	1240	620
											9630	1087	1300	613
Dep 9637 RunCold	9639	1133	1260	1270	963	Co					9628	500 1077	1297	703
	9640	1127	1227	1237	937				454 Cold 96 Hot		29	1037	1197	677
											30	1057	1230	640

6 Rings

		Cold	.50	½	Hot	100	½	Hot	
greenly 23 fl 719 — 4.1 24.	9641	1067	1100	1153	443	780	850	487	Co
	9642	1107	1100	1160	423	847	993	460	
2182 lcft 7657	9643	1107	1110	1170	417	867	1050	510	
Dup 9641 Run Cold	9644	1160	1227	1243	940				Co
	9645	1103	1167	1187	917				
	9646	1117	1197	1217	980				
719 – 3 greenly – 2 5 green to Holtq – 7696	9647								
Ra 1120 – greenly No 3 green has much fines – 4.3 24.	9648	1127	1163	1183	397				Co
	9649	1130	1153	1173	377				
6991	9650	1160	1173	1200	403				
Dup 9649 Run Cold	9651	1133	1140	1147	973				Co
	9652	1130	1133	1147	987				
	9653	1130	1123	1137	970				

			50	½	Hot	100	½	Hot	150	½	H	200	½	H		
9660 450 1157 1350 773 61 1133 1343 734							9660 9661 9662 9663	1230 1183 1360 1183	1353 1297 1480 1367 1423	750 733 663 567	300 1190 1193 1320 1190	1347 1310 1443 1370 1403	710 680 727 603	350 1210 1200 1287 1177	1413 1370 1563 1428 1493	617 603 567 557
greenly to 22 ft not oxidized 719 + 4. 24 - 21K2 Gold flake head & crumpled by hand not fully oxidized 7524	9660 9661	1123 1150	1253 1183	1277 1210	483 420	1260 1183	1300 1240	453 407	1253 1177 See No 7 Book	1357 1300	580 547	1267 1200	1367 1300	490 473		
greenly 22 ft not ox Ra 723 ½ w not fil [illegible] 4.1 24.1 flake crumpled by hand 21K2 Gold 7658	9662 9663	1170 1100	1267 1157	1300 1200 1250	457 383	1317 1163	1360 1220 1290	427 350	1337 1183	1477 1320 1399	547 410	1350 1167	1467 1340 1403	477 370		
Ra 1121 greenly 3 ft - 4.3 24 - green has black particles when [illegible] 21K2 Gold 7805	9664 9665	1197 1260	1333 1313	1360 1337	450 417	1353 1333	1393 1387	423 407	1180 1213	1443 1473	503 503	1067 1067	1283 1283	500 497	Co	
Dup 9664 Run Cold	9666 9667	1187 1183	1193 1183	1220 1217	980 963	1230 1217	1260 1240	1110 1087	Co							
Ra 729 - Dup of 725 - except wash boiled down very thick before dropping in pan 4.3 24.1 21K2 Gold 7960	9668 9669	1267 1247	1387 1333 2720 1360	1410 1360	497 447	1300 1273	1387 1367	437 437	1080 1117	1327 1350	590 567	957 1037	1150 1213	533 550	Co	
Dup 9668 Run Cold	9670 9671	1277 1277	1287 1273	1313 1363	1020 997	1307 1297	1343 1337	1197 1150	Co							

			50	1/2	Hot
Greenlap 22 fl oxidized + run then H (dropped) - 723 green 4.1 24-	9672	1057	1067	1183	440
21K2 LiOH. 7807	9673	1127	1183	1293	443
Dup 9672 Except 719	9674	1073	940	1093	450
7700	9675	1107	1067	1177	460
Greenlap 24 f not oxidized 719 green — flake had to be crumbled by hand to feed — 4.2 24	9676	1127	1210	1227	347
21K2 LiOH. 7624	9677	1093	1180	1203	343
Dup 9676 Except 723 green 4.3 23.8	9678	1170	1297	1320	353
7740	9679	1143	1263	1293	383
Tubes loaded with green from 9012 without flake = dipped in XCP [illegible] [illegible]	9680	/	/	/	/
21K2 LiOH. 7167	9681	/	/	/	/
Ra 730 - Except dup 728 green — greenlap 3 fl — 43 24	9682	1313	1333	1373	413
Same color as 728 g	9683	1327	1327	1363	390
8143	9684	1323	1340	1370	333
Dup 9682 Run Cold	9685	1313	1353	1380	1017
	9686	1323	1380	1403	1010
	9687	1327	1360	1370	1033
		400			
	9685	1097	1257	960	
	9686	1087	1237	730	
	9687	1123	1280	1020	

100 1/2 Hot 150 1/2 H

Cut Out Notice Bad flake

Co

			400						
		9676	1200	1383	720	Bad flake			
		9677	1217	1337	673				
1197	1250	537	1163	1283	600	1150	1260	693	Co
1183	1220	493	1140	1257	577	1133	1240	637	
1343	1393	590	1307	1477	703	1297	1483	730	Co
1290	1317	567	1263	1370	597	1253	1363	640	
Compared	350								
	9678	1190	1443	823					
	79	1200	1357	733					
1180	1333	617	913	1073	530	847	993		Co
1223	1330	647	913	1123	580	863	1030		
1180	1333	593	893	1083	550	850	993		
						200			
1400	1447	1147	1377	1467	1177	1300	1423	1200	
1423	1463	1167	1377	1457	1177	1280	1400	1190	
1403	1450	1170	1390	1477	1190	1310	1433	1207	
	250			300			350		
9685	1247	1367	1120	1257	1385	1103	1253	1370	983
86	1217	1347	1093	1200	1347	1067	1240	1353	867
87	1228	1417	1120	1243	1373	1123	1263	1387	997

			50	½	Hot	100	½	Hot	
Ra 731 A. 21K2LiOH	9688	1240	1240	1283	370	1000	1150	533	Co
10 hours at 180 F	9689	1230	1227	1257	370	1043	1197	597	
4.3 24.1 44.3 gravity	9690	1240	1083	1167	333	1000	1023	513	
731 [illegible] 7134								3)1643 548	
Ra 731 ~~A~~ Dup 9688	9691	1237	1273	1290	973				
Run Cold	9692	1233	1280	1297	973	Co			
21K2LiOH	9693	1257	1273	1293	960				
Ra 731B.	9694	1273	1253	1293	367	1073	1227	587	Co
25 hours at 180	9695	1277	1307	1333	407	1187	1310	547	
21K2LiOH	9696	1283	1293	1320	390	1067	1273	507	
4.3 23.8. 7,381						3327 1109		3)1641 547	
731 B Dup 9694	9697	1290	1313	1327	977				
Run Cold	9698	1307	1320	1340	983	Co			
21K2LiOH,	9699	1300	1313	1330	957				
731 C	9700	1297	1327	1347	380	1117	1273	463	Co
50 hours 180 Tabs	9701	1310	1340	1363	383	1187	1310	493	
4.3 24.1 21K2LiOH,	9702	1317	1340	1367	357	1190	1310	507	
7677						3494 1165		3)1463 488	
731 C Dup 9700	9703	1323	1340	1363	1033				
Run Cold	9704	1310	1347	1370	1017	Co			
21K2LiOH.	9705	1320	1320	1347	1000				

11·2a

			50	1/2	Hot	100	1/2	Hot	150	1/2	H
[illegible] 24 fl oxidized Alum H 723 [illegible] 4.2 24 [illegible]° flake [illegible] 21K2 LiOH. 7812	9706	1143	1140	1167	383	927	1117	480			
	9707	1160	1220	1253	353	1133	1267	500			
Dup 9706 Except 719 — 21K2 LiOH. 7576	9708	1063	953	1050	347	783	1000	470			
	9709	1073	973	1093	357	750	1010	503			
731 D Run 100 hours 180° 21K2 LiOH 4.3 23.9 No 3 fl 7890	9710	1150	1300	1323	387	1200	1313	540	990	1157	567
	9711	1153	1300	1323	423	1257	1350	573	1050	1267	580
	9712	1167	1317	1347	477	1257	1377	577	950	1190	587
			3)3917 1306			3714 1238					3)1734 578
Dup 9710 Run Cold 21K2 LiOH.	9713	1153	1322	1350	1007						
	9714	1157	1316	1340	873						
	9715	1167	1327	1353	867						
731 E Run 10 hours 212 fah 21K2 LiOH. 4.3 24 No 3 fl 7,281	9716	1210	1250	1290	463	1000	1180	547			
	9717	1197	1220	1267	453	933	1150	557			
	9718	1183	1197	1250	443	953	1150	533			
			3)3667 1222					3)1637 546			
731 E Dup 9716 Run Cold 21K2 LiOH.	9719	1193	1286	1297	947						
	9720	1210	1257	1270	950						
	9721	1220	1273	1290	977						
731 F Run 25 hours 212° 21K2 LiOH. 4.2 24 No 3 flake — 7338	9722	1187	1273	1307	487	1117	1280	593			
	9723	1177	1287	1317	487	1010	1240	527			
	9724	1157	1247	1273	460	890	1217	530			
			3)3807 1269					3)1650 550			

Note flake

Holland to test with Strong LiOH,

50 Hot

10 hours 180 1233
25 " " 1284
50 1336
100 " " 1306
10 " 212 1224
25 " " 1269
50 " " 1316
100 " " 1330

Hot
370 7134
388 7381
393 7677
429 7890
429 7281
468 7338
471 815
516 7670

			50	1/2	Hot	100	1/2	Hot	150	1/2	Hot			
731 F. Dup 9722	9725	1187	1253	1267	950		Co							
Run Cold	9726	1187	1260	1273	957									
21K2L10H.	9727	1183	1263	1280	957									
731 G.	9728	1283	1327	1357	467	1120	1287	500		Co				
Run 50 hours 212°	9729	1273	1297	1323	450	1120	1293	480						
21K2L10H. 4.3 23.9	9730	1273	1323	1347	497	1200	1360	520						
No3 fl flake 8115						13440 1147		1480 493						
731 G Dup 9728	9731	1273	1330	1357	953		Co							
Run Cold.	9732	1287	1333	1363	987									
21K2L10H.	9733	1273	1333	1363	993									
R.a. 732.	9734	1247	1343	1367	537	1267	1380	563			Co			
Whatco et	9735	1253	1330	1347	513	1163	1307	567						
No3 flake 8225	9736	1247	1317	1333	497	1240	1367	457						
731 H Dup 9734	9737	1243	1310	1333	977		Co							
Run Cold.	9738	1247	1263	1293	997									
21K2L10H.	9739	1247	1337	1363	970									
Ra 725 - fm Sloringe B Co No3 granular - 4.2 24	9740	1230	1330	1350	517	1350	1443	590	1077	1370	587	Co		
21K2L10H. 7943	9741	1233	1347	1367	577	1267	1410	580	1027	1267	573			
Dup 9740	9742	1220	1293	1330	970	1317	1377	1100	1300	1393	1127	1247	1370	1157
Run Cold	9743	1223	1293	1323	990	1320	1367 250	1107	1287	1373 300	1133	1230	1353	1157
9742	400 1153	1290	1067			9742	1253	1373	1113	1230	1343	1103		
9743	1113	1253	933			9743	1200	1328	1103	1220	1340	1083		

	380		
9742	1240	1347	1063
9743	1223	1333	907

						100	1/2	H	
731 Ra G. Run 100 hours 212 4.3 23.9 7670 21K2L0H	9744	1203	1287	1330	540	1100	1247	573	Co
	9745	1207	1327	1363	603	1087	1240	590	
	9746	1227	1333	1363	597	1170	1293	590	
						3357 1119		1753 584	
Dup 9744 Run Cold - 21K2L0H	9747	1233	1293	1313	1040	Co			
	9748	1230	1293	1317	1020				
	9749	1233	1303	1323	1017				
RA 730 green from Storage B Co 4.2 23.9 No 4 greenly fl flake bulky new lot not quite as bulky as No 3 21K2L0H 8073	9750	1233	1333	1367		1153	1317	583	Co
	9751	1240	1363	1393		1277	1383	610	
Dup 9750 Run Cold	9752	1240	1327	1353	990	Co			
	9753	1250	1317	1340	990				
Ra 731 - No 4 greenly 4.2 24- 21K2L0H, 7908	9754	1190	1333	1370	673	1087	1273	570	Co
	9755	1217	1350	1373	637	1260	1363	560	
	9756	1243	1370	1397	617	1227	1370	560	
			4053 1351						
Dup 9754 Run Cold	9757	1227	1293	1317	987	Co			
	9758	1230	1293	1323	1007				
	9759	1210	1250	1277	943				
Ra 731 "I" 4.1 24.1 greenly 24 flake - 21K2L0H. 7531 green bulky - flake bulky from this group on new lot flake	9760	1170	1120	1163	533	Co			
	9761	1220	1183	1250	540				
	9762	1217	1167	1250	533				

						100	1/2	H	150	1/2	H	200	1/2	H			
Dup 9760 Run [illegible] marked run hot	9763	1233	1253	1267	950												Co
	9764	1220	1233	1250	927												
	9765	1200	1220	1253	877												
Ra 731 J. ~~[illegible]~~ greasy · 24 fl 4.3 24.2 green gritty flake bucky 21KZ Lion · 8066	9766	1067	1223	1260													Co
	9767	1123	1263	1293													
	9768	1100	1250	1263													
Dup 9766 Run Cold	9769	1080	1183	1210	933												Co
	9770	1107	1167	1200	900												
	9771	1107	1203	1223	937												
Dup 9750 Except greasing 24 bucky flake 4:1 24 21K Z Lion – 7942	9772	1267	1333	1367	520	1290	1383	563	1127	1397	520						Co
	9773	1263	1350	1373	560	1290	1377	533	1173	1413	550						
Dup 9772 Run Cold	9774	1263	1313	1333	1003												Co
	9775	1250	1280	1300	997												
Dup 9754 Except greasing to 24 fl bucky 4.3 24.1 21KZ Lion. 7885	9776	1233	1303	1333	587	1263	1360	524	1157	1257	533	1147	1157	1117	1323	417	Co
	9777	1243	1300	1333	583	1263	1360	483	1140	1367	500	1200	1350	1110	1368	630	
	9778	1240	1330	1363	693	1297	1403	513	1183	1450	570	1307	1447	1190	1400	673	
Dup 9776 Run Cold	9779	1250	1293	1320	1030												Co
	9780	1257	1283	1313	1027												
	9781	1223	1237	1277	970												

Put in new Fr 150 200

6 Temp

			50	1/2	Hot	100	1/2	H	150	1/2	H	
RA 731 K – greasy 24f bulky 4.3 24.1 21K2 [illegible] 7962	9782	1000	1133	1157	493	1180	1290	553	1160	1300	747	Co
	9783	1017	1193	1220	523	1220	1310	593	1117	1267	683	
	9784	1027	1193	1217	523	1217	1327	603	1123	1290	720	
Dup 9782 Run Cold	9785	1007	1127	1147	913	Co						
	9486	997	1127	1147	927							
	9787	1013	1140	1163	927							
RA 731 "L" 24 greasy bulky film 4.3 24.1 21K2 [illegible] 7975	9788	933	1153	1180	570	1167	1243	563	1100	1240	673	
	9789	1000	1160	1197	510	1153	1250	563	1090	1243	653	
Dup 9788 Run Cold	9790	970	1069	1100	870	Co						
	9791	963	1093	1113	883							
RA 731 M – greasy 24 bulky 4.3 24. green seems to be slightly moist. 21K2 [illegible] 7748	9792	1177	1250	1290	450	1267	1330	500	1293	1320	593	Co
	9793	1157	1180	1260	410	1090	1303	517	997	1250	583	
	9794	1180	1217	1267	393	1117	1297	493	1007	1250	563	
Dup 9792 Run Cold	9795	1137	1223	1253	927	Co						
	9796	1093	1233	1257	943							
	9797	1170	1180	1200	913							
RA 731 – ground at [illegible] B Co 24 greasy fl bulky 4.1 24 – 21K2 [illegible] 7998	9798	1233	1303	1327	377	1280	1367	480	1167	1223	477	Co
	9799	1233	1287	1320	353	1333	1417	547	1150	1340	487	
Dup 9798 Run Cold	9800	1243	1267	1310	957	Co						
	9801	1250	1283	1320	940							

			50	1/2	Hot	100	1/2	H	150	1/2	H	200	1/2	Hot
RA 731 N- 4.3 23.8 No 24 of bulky tough Reg bag lot [illegible] -1A green has lot black 8159 Kernals ZIRZLi	9802	1040	1193	1207	403	1210	1327	623	1093	1287	717	Co		
	9803	157	1187	1210	390	1200	1313	580	1097	1310	717			
	9804	1050	1163	1183	387	1183	1290	550	1140	1283	667			
Dup 9802 Run Cold	9805	1067	1143	1183	883	Co								
	9806	1080	1147	1183	910									
	9807	1080	1163	1197	900									
RA 731 O- 24 fl - 4.1 23.8 green to black a [illegible] take up moisture - ZIRZlicH- 8550 S	9808	1027	1110	1157	467	1093	1263	660	Co					
	9809	1047	1127	1163	447	1083	1243	673						
	9810	1033	1110	1157	430	1057	1247	650						
Dup 9808 Run Cold	9811	1010	1073	1167	823	Co								
	9812	1007	1067	1183	833									
	9813	1010	1080	1180	830								S see floor samples	
RA 733- 24 fl 4.1 24.1 green some Orange + gritty ZIRZLicH. 7899	9814	1127	1230	1253	357	243	1377	540	1050	1383	590	467	1357	690
	9815	1130	1253	1267	370	243	1333	537	1180	1310	577	1160	1353	673
	9816	1120	1237	1257	377	227	1327	493	1140	1310	583	1117	1323	583
Dup 9814 Run Cold	9817	1130	1220	1240	970	Co								
	9818	1120	1220	1240	967									
	9819	1137	1217	1237	970									

			50	1/2	Hol	100	1/2	H	150	1/2	H	200	1/2	H	
RA 734 24 f 4.1 23.8 green semi porous + gritty 21 K 2 LiOH 7689	9820	1190	1260	1273	353	1267	1333	433	1183	1310	627	1197	1360	687	Cu
	9821	1190	1260	1277	370	1273	1350	460	1240	1317	733	1220	1393	697	
	9822	1180	1240	1260	350	1253	1317	413	1223	1320	757	1227	1380	753	
Dup 9820 Run Cold	9823	1177	1220	1250	953	Co									
	9824	1183	1247	1270	983										
	9825	1183	1240	1273	973										
	9826 To 9840	for Holland													
RA 735 24 flake - 4.3 23.8 21 K 2 LiOH 7878	9841	1233	1310	1343		1267	1423	563	1220	1413	533	1173	1423	607	Cu
	9842	1233	1320	1350		1323	1430	607	1297	1437	580	1233	1440	643	
	9843	1227	1310	1360		1260	1437	547	1220	1410	553	1160	1400	593	
Dup 9841 RUN COLD	9844	1217	1247	1280	977	Co									
	9845	1233	1257	1270	993										
	9846	1240	1253	1267	973										
RA 736 24 fl bulky 4.1 24.1 21 K 2 LiOH 7764	9847	1210	1300	1323	373	1260	1367	510	1253	1367	550	1117	1390	627	
	9848	1223	1333	1353	373	1283	1423	473	1228	1380	527	1117	1400	613	
	9849	1213	1320	1343	383	1300	1427	480	1287	1420	523	1240	1430	613	

		Cold	50			100			150	1/2	F4				
Dup 9847	9850	1233	1257	1283	987	Co									
RUN COLD	9851	1213	1237	1270	987										
	9852	1217	1233	1260	957										
Ra 737	9853	1163	1320	1347		1303	1437	500	1287	1467	570	1217	1487	600	Co
4.3 23.8	9854	1170	1323	1347		1333	1447	487	1287	1467	567	1150	1453	573	
	9855	1173	1297	1323		1277	1440	473	1267	1430	577	1107	1417	558	
21K2 LiOH 7602															
Dup 9853	9856	1167				Co									
RUN COLD	9857	1177													
	9858	1167													
Ra 728	9859	1160	1180	1253	383		Co								
4.2 23.9	9860	1173	1180	1263	377										
	9861	1177	1200	1273	357										
21K2 LiOH															
Dup 9859	9862	1210				Co									
RUN COLD	9863	1227													
	9864	1200													
25 greeney f 719-2 h	9865	1147	1220	1253	343	1210	1302	420	1233	1317	540	1107	1317	467	Co
not oxidized –	9866	1143	1230	1257	363	1247	1353	477	1253	1333	577	1117	1310	520	
21K2 LiOH															

			50	1/2	Hot	100	1/2	H	150	1/2	H				
Dup 9865 Except 723 4.3 24. 21K2 LiOH. 7956	9867 9868	1183 1167	1227 1230	1253 1263	357/ 367	1280 1280	1370 1380	387 393	1297 1297	1410 1417 See No 7 book Corrugated	507 520	1150 1233	1440 1410	467 463	Co
27 ni f considerable Turned over + curly 719 - 2 hours Not oxidized - flake Tears apart in Hopper not very bulky. Its the heavy part knock in separator it was 4. 23.8 21 K2 LiOH. discarded because all curly couldn't get sample of good stuff before oxidizing 21K2 LiOH. 7517	9869 9870	1160 1160	1197 1207	1227 1233	360 367	1210 1233	1287 1300	433 500	1217 1267	1293 1320	513 543	1170 1170	1267 1397	420 300	Co Co
Dup 9869 flake not ox Except 723 — 21K2 LiOH. 7761	9871 9872	1130 1160	1160 1180	1200 1217	317 297	1240 1260	1333 1347	460 463	1250 1250	1367 1357	467 457	1267 1260	1410 1393	610 500	See Book 7
33 flake-bulky - 719-2 h- 4.2 23.8 flake not ox 21K2 LiOH 7706	9873 9874	1117 1127	1177 1177	1200 1200	280 320	1210 1210	1283 1290	557 523	1217 1180	1320 1300	503 530	1200 1167	1367 1323	560 490	Co
Dup 9873 Except 723 — flake not ox 21K2 LiOH. 7963-8	9875 9876	1163 1133	1213 1160	1237 1197		1267 1217	1390 1307	470 400	1293 1233	1397 1313	527 450	1280 1213	1450 1363	533 473	Cu
26 flake-bulky Not ox — 719.2h 4.3 23.8 21K2 LiOH - 7517	9877 9878	1050 1060	1133 1103	1153 1133	333 313	1213 1163	1297 1243	327 460	1233 1183	1337 1267	593 567	1213 1167	1413 1283	543 450	Co
Dup 9877 not oxidized Except 23 green. 7857 21K2 LiOH	9879 9880	1080 1100	1133 1157	1173 1200	300 320	1220 1213	1297 1317	293 403	1200 1250	1290 1357	540 627	1213 1260	1317 1400	397 490	Co
28 flake Not oxidized 719-2.h 4.2 23.8 - Very poor of curly + heavy Tears apart in Hopper when feeding - this sample taken from the heavy of the batch that was put back in the separator + would come for being heavily fines. did not get sample of good stuff as it had been ox + run through — 21K2 LiOH. 7541	9881 9882	1147 1153	1183 1183	1230 1220	373 377	1230 1223	1320 1317	437 447	1267 1237	1337 1320	650 663	1243 1213	1363 1353	533 543	

			50	½		100	½	TT	150	½	H	200	½	Hd	
Dup 9881 f not ox	9883	1207	1230	1273	337	1300	1380	370	1290	1380	560	1260	1400	517	
Except 723	9884	1197	1237	1283	360	1280	1317	333	1267	1383	470	1177	1437	467	
21K2 LiOH 7758			1235			1290			2)2557 1279			2)2437 1219			
29 flake bulky Not oxdized	9885	1093	1187	1223	430	1233	1313	397	1213	1283	487	1200	1323		Co
719 - 2 h - 4.12 23.8	9886	1067	1150	1187	427	1183	1293	363	1180	1267	507	1187	1300		
21K2 LiOH 7561			1168			1208			2)2393 1196			2)2387 1195			
Dup 9885 not oxidized f.	9887	1143	1233	1283	400	1300	1407	333	1347	1427	533	1333	1487	523	
Except 723	9888	1153	1310	1357	537	1410	1507	417	1450	1540	663	1390	1650	657	
21K2 LiOH 7796			1271			1355									
30 flake Not oxidized -	9889	1120	1200	1247	457	1200	1357	350	1230	1233	583	1200	1400	540	Co
4. 23.8 719 2 h -	9890	1130	1210	1247	390	1223	1357	363	1250	1360	630	1213	1423	560	
21K2 LiOH. 7573			1205			1211									
Dup 9889 not ox f.	9891	1137	~~X~~												
Except 723 21K2 LiOH. 7810	9892	1157	1270	1317	380	1333	1440	417	1410	1480	687	1420	1540	603	
32 f not oxidized - 719 2 h	9893	1163	1240	1283	390	1303	1417	490	1330	1410	803	1380	1510	700	
4.2 23.8	9894	1160	1217	1260	357	1280	1377	510	1307	1393	813	1317	1457	550	
21K2 LiOH. 7565			1228			1291									
Dup 9893 not ox	9895	1147	1280	1327	367	1380	1467	520	1200	1420	350	1330	1520	507	
Except 723	9896	1160	1283	1323	390	1417	1487	500	1260	1400	313	1360	1500	473	
21K2 LiOH. 7796			1281			1398									
34 f. bulky Not oxidized	9897	1110	1163	1203	353	1223	1323	470	1190	1300	393	1197	1367	537	
4.4 23.8 -	9898	1090	1157	1197	367	1223	1313	440	1190	1300	423	1200	1357	500	
21K2 LiOH. M19 7530			1160			1223									

			50	1/2		100	1/2	H	150	1/2	Hot	200	1/2	Hot
Dup 9897 not ox Except 723- 7830 21K2LiOH-	9899	1100	1210	1260	377	1290	1387	430	1260	1400	447	1290	1437	497
	9900	1100	1190	1243	360	1267	1397	387	1223	1400	473	1300	1467	523
36 f not oxidzd - bulky - 719 - 2 h - 4.1 23.8 - 7590 21K2LiOH	9901	1160	1227	1273	363	1253	1397	405	1233	1400	533	1260	1430	533
	9902	1153	1203 1215	1253	347	1227	1363	373	1167	1350	510	1187	1390	500
Dup 9901 - not ox Except 723 7879 21K2LiOH-	9903	1147	1257	1300	340	1303	1413	360	1267	1430	527	1290	1500	520
	9904	1107	1197	1250	320	1240	1357	353	1253	1383	577	1290	1443	530
26 f oxidzd + Clean Hydrogen bulky 719 - 2 H - 4.3 23.8. 7694 21K2LiOH.	9905	1130	1207	1260	373	1167	1357	440	1190	1357	628	1227	1397	560
	9906	1117	1180	1213	350	1200	1303	417	1133 2323 1161	1287	540	1167 2394 1197	1327	483
Dup 9905 Except 723- 7959 21K2LiOH.	9907	1167	1253	1300	323	1253	1393	363	1187	1400	590	1197	1427	
	9908	1157	1257	1303	373	1230	1393	313	1200 2387 1193	1423	580	1240 2437 1219	1490	
27 f bulky Ox + Clean Hydrogen 719 - 4 hours drain - 4.3 23.9 21K2LiOH. 8043	9909	1133	173	1217	330	1167	1287	363	1097	1287	497	[illegible]	[illegible]	
	9910	1167	1223	1277	363	1210	1383	443	1167 2264 1132	1373	577	[illegible]	[illegible]	
Dup 9909 Except 723. 7989 21K2LiOH.	9911	1147	1220	1273	370	1267	1390	380	1200	1383	453	1197	1413	467
	9912	1160	1233	1283	363	1307	1413	460	1200 1200	1430	547	1217 2414 1207	1440	477
28 flake Ox + Clean Hydrogen Slightly bulky - 4.3 23.9 719-4-h. 8081 21K2LiOH.	9913	1180	1237	1280	333	1227	1353	460	1033	1260	503			
	9914	1173	1250	1293	353	1237	1377	437	1117 2150 1076	1273	523			

Co

				50	½	H of	100	½	H of	150	½	H of
Dup 9913. Except 723. 21 K2 LiOH.	7970	9915	1180	1250	1307	363.	1220	1410	427.	1093	1327	593
		9916	1190	1263	1327	357.	1157	1383	423	1093 1093	1303	577
29 f ox + [illegible] — 719 - 4 - h - flake slightly bulky — 21 K2 LiOH.	8000	9917	1180	1200	1257	330	1123	1250	537	1000	1183	507
		9918	1180	1210	1260	327	1090	1243	543	983 1983 991	1183	513
Dup 9917 Except 723 — 21 K2 LiOH —	7854	9919	1203									
		9920	1190	1173	1277	310	1000	1150	410	967	1160	530
32 f Ox + [illegible]. 4.2 23.9 719 - 4 h - flake bulky this sample was mixed up they sent 2 samples marked 32 when one should have been 30 & the other 32 21 K2 LiOH.	8006	9921	1193	1207	1257	313	1023	1283	400	957	1223	507
		9922	1183	1177	1250	297	1057	1200	390	953 1910 955	1153	410
Dup 9921 Except 723.	7853	9923	1190	1153	1250	320	1023	1280		1053*	1283	617
		9924	1183	1190	1280	337	1083	1317		1093 2146 1073	1300	710
RA 731 - 24 greenly ox + H. bulky f - black Nickel Hydrate with few specs green — 4.1 23.8 21 K2 LiOH.	8634	9925	1007	1130	1220	697	1090	1273	407			
		9926	1023	1103	1220	680	1000	1273	427			
		9927	1017	1090	1200	667	1050	1277	457			
Dup 9925 Run Cold,		9928	1000									
		9929	983									
		9930	967									

Put new rings on tight so as to cause partially opened seam — Didn't do any better — Dried 24 hours & put in 38% K. 4 hrs dry [illegible] ratio — record results here

new rows on 150th run

			50			100	1/2	H	150	1/2	H	200	H/2	Hul	
35f not ox- 723 green flake bulky 4. 24- 7785 21K2LiOH.	9931 9932	1153 1123	1297 1250	1367 1327	473 433	1267 1227	1410 1387	387 350	1267 1183	1427 1370	567 580	1287 1173 2460 1230	1453 1400	440 470	Co
Dup 9931 719-4 h- 4.3 24.2 21K2LiOH. 7944	9933 9934	1087 1107	1173 1220	1260 1317	410 477	1110 1180	1290 1360	377 410	1060 1110	1283 1373	510 533				
37f-bulky slightly Curly- 719-4-h Not ox 4.3 24.2 7914 21K2LiOH.	9935 9936	1133 1123	1227 1207 1217	1317 1363	497 460	1197 1160	1423 1373	453 440	1163 1133	1397 1370	527 573	1200 1173	1400 1397	480 480	
Dup 9935 723-green 7923	9937 9938	1077 1067	1187 1180	1270 1277	427 347	1197 1150	1313 1317	343 310	1133 1093	1327 1317	463 417				
38f bulky- 719-4 h- 4.2 24.1 Not ox 8069 21K2LiOH.	9939 9940	1093 1077	1187 1180	1287 1260	353 430	1160 1163	1310 1300	363 377	1090 1100	1313 1300	457 480				
Dup 9939 723 green 7888 21K2LiOH.	9941 9942	1153 1153	1297 1273	1377 1367	430 357	1307 1247	1487 1403	417 407	1263 1183	1440 1393	517 420	1257 1223 2480 1240	1473 1400	467 403	
39f not ox 719-4-h- 4.2 24.1 21K2LiOH. 7979	9943 9944	1150 1157	1253 1213	1330 1310	343 320	1213 1193	1360 1340	333 400	1127 1163	1323 1330	423 493	1123 1107	1267 1267	367 340	Co
Dup 9943 Except 723 green 7872 21K2LiOH.	9945 9946	1173 1153	1307 1283	1380 1367	367 327	1320 1303	1443 1443	407 410	1267 1220	1427 1443	547 510	1223 1160 2 | 2383 1191	1400 1367	3c 350 333	1/3 Co

6 Rings

		Cold	50	½	Hot	100	½	H	150	½	H	200	½	H
40 f not ox - 719-4-h 4.3 24.1 - quite lot heavy - flake med - 21K 26 OH. 8058-	9947 9948	1177 1157	1263 1297	1333 1360	353 350	1250 1290	1370 1390	417 470	1183 1233	1317 1380	433 513	1253 1280 2 2533 1266	1350 1380	540 483
Dup 9947 Except 723 green 7984 21K 26 OH	9949 9950	1163 1143	1303 1307	1367 1377	343 350	1307 1333	1428 1430	477 503	1333 1370	1450 1490	610 707	1337 1400 2737 1369	1467 1500	507 500
Numbers after this are all A. Starting fresh numbers -						3 4 11	250 1183 1287 1053	1397 1450 1230	603 630 657	300 1223 1317	1433 1473	530 520		
719 - Dup of A 3A - nif not ox - Flake Bulky 7881	1 2	1143 1183	1243 1253	1323 1327	283 313	1213 1240	1340 1367	487 507	1223 1267	1327 1347	587 610	1133 1113	1283 1283	390 398
723-4h - 41 nif not ox 4.2 24.1 21K 26 OH. 7976 7881	3 4	1103 1147	1223 1300	1303 1377	303 333	1233 1323	1357 1433	510 560	1260 1350	1360 1437	623 607	1230 1333	1390 1440	400 490
719-4.h. - 42 f not ox - 4.4 24.1 Curly + Bulky 21K 26 OH 7956	5 6	1050 1037	1103 1090	1177 1153	303 257	1097 1093	1193 1190	457 350	1093 1093	1200 1167	510 450	1080 1077	1210 1180	420 373
723 - Dup 5A. 21K 26 OH 7892	7 8	1053 1060	1133 1133	1277 1223	230 293	1117 1133	1223 1247	403 410	1133 1160	1230 1263	430 457	1133 1177	1243 1293	450 400
719 - 30 flake Ox + Therm H. 4.1 24.1 flake Bulky 21K 26 OH 8065	9 10	1207 1223	1263 1243	1333 1333	347 313	1177 1063	1363 1307	367 473	1160 1133 2293 1146	1310 1293	577 643 554	993 990	1183 1163	533 587

flakes had H bubbled thru —
H_2SO_4 probably bad

	A	Cold	50	1/2	H	100	1/2	H	150	1/2	H				
723 - Dup 9 A - 4. 24 - 21 K2 LiOH. 8052	11 12	1223 1210	1300 1293	1377 1380	320 323	1327 1410	1440 1513	557 653	1310 1387 2697 1348	1410 1500	743 777	1253	1410	650	
719 - 4 h - 32 flake ox + thru H — 4.3 24.1 21 K2 LiOH 8155	13 14	1210 1193	1300 1267	1363 1347	353 363	1293 1250	1413 1380	557 623	1260 1213 2473 1236	1370 1380	643 653	1047 1033 2)2080 1040	1233 1227	523 523	Co
723 Dup 13 A. 4.3 24. 21 K2 LiOH 7996	15 16	1190 1230	1287 1400	1357 1470	340 380	1257 1330	1397 1510	563 587	1213 1260 2473 1236	1370 1437	617 710	1073 993 2)2066 1033	1250 1233	520 567	Co
719 - 4 h - 34 fl ox + thru H - 4.2 24.1 21 K2 LiOH 7966	17 18	1090 1067	1167 1157	1227 1217	270 300	1153 1157	1243 1243	370 340	1160 1180 1170	1263 1267	557 500	1153 1167 2320 1160	1267 1260	460 393	Co
723 - Dup A. 17 4.4 24. 21 K2 LiOH. 7916	19 20	1090 1047	1197 1130	1260 1197	293 263	1200 1103	1300 1210	367 397	1220 1133 2353 1176	1307 1233	550 460	1213 1167 2)2380 1190	1333 1270	443 300	Co
719 - 35 f ox + thru H. 4.1 24.1 21 K2 LiOH. 7963	21 22	1063 1063	1197 1153	1250 1223	237 320	1173 1163	1263 1263	493 517	1183 1157 2340 1170	1267 1263	463 507	1167 1150	1260 1267	437 437	Co
723 Dup 21 A. 4.3 24. 21 K2 LiOH. 7886	23 24	1040 1057	1153 1167	1223 1240	287 280	1163 1187	1263 1277	473 447	1157 1200 2357 1178	1260 1293	477 470	1150 1197 2)2347 1149	1280 1307	403 443	Co
719 - 36 f ox + thru H. 4.3 24.1 21 K2 LiOH 8081	25 26	1200 1200	1207 1223	1237 1250	237 303	1210 1210	1280 1307	290 397	1183 1230 2413 1206	1317 1303	543 620	1123 1063	1260 1267	407 527	Co

580

A

			50			100			150						
723 Dup 25 A. 4.2 24. 21K2LiOH – 7974	27 28	1223 1213	1243 1233	1280 1263	330 317	1260 1267	1363 1360	380 373	1260 1260 12.60	1380 1373	583 593	1190 1210 2)2400 1200	1347 1367	450 520	Co
719 – 33 f Ox Flwuth. 4.1 24.1 21K2LiOH. 7958	29 30	1233 1247	1240 1170	1293 1267	313 330	1090 1067	1263 1220	440 407	1157 1050 2207 1103	1317 1227	547 510	1023 960	1213 1123	533 487	Co
723 Dup 29 A. 4.3 24. 21K2LiOH. 7976	31 32	1243 1250	1283 1260	1330 1310	333 323	1280 1220	1427 1370	487 497	1313 1217 2530 1265	1423 1373	570 577	1207 1077 2)2284 1142	1367 1267	553 423	Co
719 37 f Oxa H – 4.3 24.1 bulky + Curly 21K2LiOH 8054	33 34	1130 1130	1143 1140	1183 1190	290 310	1140 1140	1233 1227	413 397	1153 1153	1250 1243	480 530	1123 1147	1227 1243	417 427	Co
723 – Dup 33 A 4.4 24 21K2LiOH. 7986	35 36	1183 1163	1197 1170	1247 1210	297 290	1210 1210	1303 1310	400 217	1217 1167 2384 1192	1313 1273	530 427	1193 1147 2)2340 1170	1313 1290	437 353	Co
719 No1 A flake. 4.2 24.1 flake bulky 21K2LiOH. 8053	37 38	1137 1133	1200 1220	1243 1253	303 320	1167 1210	1277 1300	310 367	1113 1183 2296 1148	1257 1300	440 483	1033 1116	1187 1227	447 470	Co
723 – Dup 37 A. 4.3 24. 21K2LiOH. 8011	39 40	1133 1147	1250 1230	1300 1280	330 320	1287 1233	1397 1363	420 383	1283 1227 2510 1255	1400 1343	530 510	1187 1153 2340 1170	1357 1313	510 457	Co
Ra 739 24 grey fl 4.3 24 21K2LiOH. 7550	41 42 43	1227 1230 1227	1327 1303 1290	1383 1350 1340	437 397 393	1187 1250 1200	1390 1383 1377	600 523 467	1240 1250 1180	1423 1383 1357	660 600 547	1087 1057 997	1323 1297 997	537 487 410	Co

47 = used Reg heavy Fe from 5BC hereafter

	A		50			100	1/2	Hrl							
Dup 41 A. Run Cold. 21K2 LiOH.	44	1217		Co											
	45	1240													
	46	1243													
RA 740 24 g greenly 4.2 23.9 21K2 LiOH: machine made Fe used hereafter 7544	47	1237	1187	1367	407	1307	1453	647	1153	1400	517	822	987	380	Co
	48	1240	1217	1367	417	1250	1393	508	1120	1333	557	887	1067	410	
	49	1223	1420	1453	467	1393	1500	530	1400	1513	667	1133	1400	490	
Dup 47 A. Run Cold 21K2 Li	50	1253		Co											
	51	1250													
	52	1233													
RA 742 dried deep pans 24 g greenly black 4.3 24.2 21K2 LiOH. 7695	53	1173	1323	1363	430	1303	1410	423	1280	1397	620	1083	1367	550	Co
	54	1200	1350	1363	433	1290	1363	327	1280	1400	607	1053	1347	533	
	55	1183	1330	1367	420	1250	1340	303	1300	1400	630	1150	1363	1150	
Dup 53 A, Run Cold 21K2 Li	56	1180		Co											
	57	1187													
	58	1183													
Expmt 1 = Ni 4 1A. ox black gro peacock reduced by purified H - bubble thru H_2SO_4 pipe full wet stuff - 4 hours 800 deg 718 green 4.2 23.8 7557	59	1183	1257	1300	413	1250	1347	370	1190	1343	660	1053	1263	500	Co
	60	1193	1287	1320	417	1280	1383	410	1227	1377	703	1107	1283	467	
	61	1200	1360	1400	450	1357	1460	500	1290	1450	670	1120	1400	573	
									3/3707 1236						

New Fe
note bad effect
of new iron

	A	Cold	50	1/2	H	100	1/2	Hot	150						
Dup 59 A. Except 719 green 4.4 24 21K2 LiOH 8205 —	62	1197	1237	1287	333	1287	1343	437	1133	1317	507	1013	1177	467	Co
	63	1193	1200	1253	337	1157	1310	437	1077	1267	617	1030	1160	447	
	64	1223	1243	1287	360	1190	1323	427	1090	1267	597	1033	1190	517	
Dup 59 A. Except 723 — 21K2 LiOH 7940	65	1177	1237	1283	373	1283	1363	460	1253	1390	603	1160	1353	523	Co
	66	1170	1243	1290	377	1290	1377	480	1240	1390	610	1160	1360	497	
	67	1170	1230	1283	377	1267	1377	467	1230	1390	593	1120	1347	497	
Expt No 2 Dup of Expt 1 Except reduced in H. 2 hours 718 green 4.5 24 — 21K2 LiOH 7477 H_2SO_4 bubbling bad pipes —	68	1160	1220	1263	417	1217	1320	477	1163	1320	647	1060	1263	470	Co
	69	1127	1283	1327	433	1333	1423	483	1317	1457	720	1160	1420	553	
	70	1130	1253	1287	433	1217	1350	400	1187	1360	690	1120	1320	533	
Dup 68A. Except 719 4.2 24 21K2 LiOH 8155	71	1100	1210	1247	317	1187	1283	313	1143	1287	603	1103	1263	460	Co
	72	1083	1173	1220	330	1197	1287	333	1133	1267	530	1117	1243	477	
	73	1040	1063	1127	313	1100	1183	323	1040	1160	433	1027	1160	363	
Dup 68A. Except 723 7886	74	1057	1180	1233	340	1213	1303	423	1157	1323	533	1167	1337	560	Co
	75	1057	1177	1227	330	1233	1317	440	1167	1333	580	1167	1350	483	
	76	1073	1177	1233	330	1227	1323	463	1187	1330	560	1130	1320	517	
Expt No 3 — Dup of Expt 1 Except reduced in H 1 hour purified — bubbling H_2SO_4 bad lines — bluish flaky 718 — 7413	77	1150	1243	1300	383				1100	1323	663	980	1243	503	Co
	78	1160	1300	1350	423				1200	1383	643	1117	1363	557	
	79	1157	1303	1327	387				1133	1300	580	1027	1243	530	

		Cub	50	1/2	Hot	100	1/2	Hot	150	1/2	Hot				
Dup 77 A. 719 8128	80	1117	1170	1233	300	1123	1263	267	1090	1250	867	1027	1177	410	Co
	81	1167	1240	1283	353	1253	1310	333	1183	1267	513	1130	1230	457	
	82	1140	1240	1303	413	1247	1350	410	1117	1303	513	1023	1317	503	
Dup 77A. 723 7819	83	1103	1243	1280	313	1283	1367	433	1223	1357	540	1117	1330	560	Co
	84	1090	1253	1283	287	1267	1350	450	1193	1357	603	1130	1330	577	
	85	1100	1237	1267	323	1253	1373	470	1130	1343	580	1067	1320	473	
Expmt Dally No 4 – No 1 A f 6ig [illegible] Ox blackish no peacock – reduced in H not purified – 4 hours at 800 fahr 718 green – 4.1 24 – pipes had acid in it. 7505 21K2 LiOH	86	1173	1277	1300	363	1267	1367	473	1223	1357	507	1117	1323	560	Co
	87	1170	1267	1293	347	1233	1360	433	1150	1313	540	1067	1260	517	
	88	1173	1283	1316	367	1277	1397	387	1133	1313	503	1060	1260	500	
Dup 86. 719 4 h – 4.3 24. 21K2 LiOH – 8099	89	1127	1210	1250	293	1153	1287	317	1063	1243	420	1023	1163	400	Co
	90	1147	1210	1250	270	1200	1303	323	1133	1267	430	1080	1227	407	
	91	1133	1187	1230	287	1173	1277	343	1117	1250	477	1050	1200	440	
Dup 86 – 723 green 21K2Li 7829	92	1117	1210	1267	267	1243	1330	343	1183	1353	507	1130	1343	470	Co
	93	1147	1230	1263	273	1277	1357	263	1200	1353	557	1137	1330	500	
	94	1133	1237	1280	293	1297	1370	397	1267	1397	600	1157	1387	547	
Expmt Dally 5 Dup of Expt 4 Except reduced in hydrogen 2 hours pipes had H_2SO_4 in – 718 – 4.2 24 21K2Li 7499	95	1197	1300	1333	317	1240	1397	433	1130	1333	557	970	1207	483	Co
	96	1197	1297	1323	320	1230	1340	400	1127	1287	510	1000	1170	443	
	97	1193	1300	1333	333	1230	1373	443	1087	1310	540	953	1157	430	

new fe after 150

Note bad effect iron on Ni

[illegible]

	A	Cold	50	½	H	100	½	H	150	½	Hot				
Dup 95 – 719 4 h – 4.3 24 21K26 8098	98	1183	1267	1293	270	1180	1300	367	[illegible]	[illegible]	[illegible]	1000	1133	420	Cd
	99	1183	1277	1303	253	1177	1317	340	[illegible]		[illegible]	1030	1183	477	
	100	1180	1233	1287	247	1130	1207	313	[illegible]		[illegible]	1087	1293	453	
Dup 95 723 green 4.2 24 21K26 7834	101	1170	1277	1307	277	1370	1417	593	1370	1510	763	1217	1437	403	Cd
	102	1186	1307	1330	277	1360	1403	580	1347	1430	733	1197	1403	453	
	103	1167	1277	1303	283	1347	1370	493	1277 ✓	1380	623	1153	1320	437	
Expmt Dally – No 1 A big lot flake Oxidized black no peacock reduced by unpurified Hydrogen at 800 Fahr. 2 hours after washing pipes free of acid + sediment. 718 green 4.2 23.9 f bulky 7400 21K26oH.	104	1217	1290	1313	300	1273	1367	467	1193	1320	557				
	105	1197	1267	1293	297	1267	1350	517	1193	1313	563				
	106	1190	1263	1287	303	1273	1343	533	1193	1303	583				
Dup 104 A 719 – 4 h – 4.2 24 – 21K2606 8167	107	1210	1233	1257	277	1260	1333	487	1193	1320	1[illegible]				
	108	1183	1230	1260	223	1223	1330	470	1163	1300					
	109	1193	1233	1263	277	1230	1320	460	1133	1263					
Dup 104 A 723 green 4.2 24 24K22066 – 7898	110	1190	1260	1297	287	1317	1393	457	1223	1397	490	1187	1360	423	Cd
	111	1187	1260	1300	310	1293	1377	460	1193	1330	470	1133	1310	440	
	112	1163	1230	1267	290	1293	1350	407	1210	1353	437	1217	1367	477	

Diference in loading Wts of 719 is due To difeurent loading much one grows 8150
The o Chg 7800 —

			A	50	1/2	H	100	1/2	H	150	1/2	H			
Expmt Dally-No 7 Except 4 hours in Hydrogen unpurified — 4. 23.9 of bucky- 718 green 21K2LiOH.	7399	113	1210	1307	1350	350	1173	1350	493	1053	1223	470			
		114	1217	1330	1367	383	1213	1367	547	1077	1273	560			
		115	1223	1267	1330	387	1183	1317	563	1077	1250	557			
Dup 113 A. 719-4 h 4.3 24. 21K2Li	8210	116	1267	1250	1293	337	1200	1330	510	1100	1263	573			
		117	1270	1257	1300	333	1213	1307	490	1143	1267	523			
		118	1260	1237	1283	310	1213	1300	457	1120	1250	507			
Dup 113 A. 723 green 4. 24- 21K2Li	7579	119	1233	1240	1283	343	1283	1357	453	1173	1317	507			
		120	1260	1293	1330	340	1313	1390	493	1170	1347	517			
		121	1224	1287	1320	287	1243	1357	457	1067	1280	450			
Dally Expmt 8 — Dup of No 6 except 1 hour 718 4. 23.9 21K2LiOH. buckyflake compare this with Expmt 3 note the Color	7395	122	1223	1320	1360	357	1290	1393	533	1180	1333	540			
		123	1200	1310	1353	377	1290	1390	513	1120	1290	547			
		124	1210	1297	1333	357	1290	1377	553	1190	1333	577			
Dup 122 719-4 h. 4.3 24 21K2Li	8124	125	1240	1240	1287	343	1220	1307	483	1123	1253	513			
		126	1267	1287	1327	373	1297	1373	527	1200	1333	570			
		127	1240	1240	1383	360	1213	1303	547	1113	1267	483			
Dup 122 723 green. 4.1 24-	7814	128	1213	1263	1310	413	1317	1397	580	1253	1383	523	1237	1430	560
		129	1207	1240	1283	350	1280	1357	613	1213	1373	487	1197	1353	503
		130	1207	1267	1307	333	1327	1397	633	1237	1387	527	1217	1377	463

	A												
Expmt Dally No9 1A f big lot Oxidized black no pancack - reduced unpurified Hy at 400 fahr 4 hours after washing all pipes 718 — 4.3 23.9 gas only water washed 21K2Li 7388	131	1207	1283	1313	417	1310	1417	753	1293	1440	690		
	132	1207	1287	1317	460	1297	1383	693	1248	1390	600		
	133	1140	1200	1243	547	1287	1373	683	1260 3796 1265	1390	597		
Dup 131A 719-4 h — 4.2 24. 21K2Li 8129	134	1200	1193	1233	467	1210	1287	473	1143	1267	450		
	135	1217	1233	1280	410	1247	1327	523	1180	1297	500		
	136	1200	1200	1240	320	1200	1267	447	1130 3453 1151	1237	443		
Dup 131A 723 green 4.3 24 21K2Li 7759	137	1173	1233	1277	323	1277	1350	460	1237	1343	510	1193	1340	480
	138	1173	1250	1287	330	1287	1350	460	1257	1367	533	1200	1333	427
	139	1200	1220	1283	373	1240	1330	467	1197 3691 1230	1333	453	1133	1327	443
Dally Expmt 10 Dup No9 Expmt Except reduced in Unpurified H. 2 hours at 400 fahr 718 green 4.3 24.1 1A big lot fl. Hard samples 21K2Li 7397	140	1203	1370	1403	570	1383	1473	603	1293	1440	620		
	141	1213	1297	1333	447	1270	1420	543	1233	1347	687		
	142	1213	1277	1333	417	1247	1377	553	1147 3673 1224	1333	580		
Dup 140 719-4-h- 4.3 24 21K 2L. 8125	143	1153	1240	1290	330	1237	1347	467	1177	1327	540		
	144	1147	1203	1257	307	1200	1293	423	1157	1280	537		
	145	1143	1203	1257	267	1200	1273	407	1130 3464 1155	1237	500		
Dup 140 723 green 4.3 24 21K2Li	146	1127	1223	1270	300	1237	1300	377	1187	1307	460		
	147	1133	1240	1297	330	1283	1347	370	1200	1343	467		
	148	1130	1240	1297	387	1263	1347	377	1237 3624 1208	1343	423		

Co

lly Expmt 11 Dup of 9 Expmt reduced in unpurified H 1 hour at 10– 4.1 24.1 bulky blue flakes in it 718 gr 21K2Li 7315	149 150 151	1243 1233 1283	1350 1263 1247	1407 1333 1333	517 413 397
Dup 149 719-4-h- 4.4 24 21K2Li 8094	152 153 154	1190 1167 1200	1297 1207 1263	1303 1260 1313	320 313 347
Dup 149 723 green 4.3 24 7848	155 156 157	1150 1147 1170	1247 1263 1303	1303 1307 1347	333 340 340
Daily Expmt No 12. 1A flake by [illegible] Ox black no peacock reduced in unpurified H – at 1000 deg F ½ hour Clean pipe – flake frozen yellow Very bright, irregular – 4.3 24.1 & bulky & crumpled – 1A [illegible] 21K2Li [illegible] 7488	158 159 160	1220 1227 1217	1267 1283 1217	1347 1350 1293	433 433 383
Dup 158 719-4 h- 4.4 24 21K2Li 8221	161 162 163	1210 1227 1237	1187 1237 1247	1260 1303 1310	350 387 347
Dup 158 723 green 4.3 24- 21K2Li 7876	164 165 166	1200 1180 1210	1283 1247 1247	1333 1307 1317	

1090 1027 1027	1230 1267 1237	233 357 333	973 963 963 2899 966	1123 1137 1190	360 420 467	Hooper Expmts 9 [illegible]
1167 1153 1233	1300 1260 1387	377 340 437	1120 1110 1153 3383 1128	1253 1213 1067	497 487 540	Co
1233 1193 1277	1360 1337 1423	470 517 493	1153 1140 1217 3510 1170	1323 1330 1383	533 553 563	Cc
1023 1040 960	1257 1257 1167	493 497 480	887 917 887 2691 877	1047 1067 1020	550 513 453	Gone to Holland
1023 1050 1063	1167 1233 1213	477 570 433	960 960 1007 2927 976	1047 1083 1087	453 543 523	to Holland
1150 1127 1037	1340 1327 1277	513 477 440	1080 1047 987 3114 1038	1230 1200 1153	623 557 540	Holland

	A														
Exmpt Dally 13 Dup of 12 Except reduced H unpurified 2 hours 718 4.4 24.1 21K2Li066. 7409	167	1227	1307	1373	450	1190	1393	543	1080	1283	653				to Hallam
	168	1237	1260	1320	320	1100	1313	417	1017	1157	387				
	169	1233	1303	1343	370	1117	1323	430	1020 3117 1039	1163	440				
Dup 167 719-4 h-4.1 24 21K2Li84. 8057	170	1240	1253	1313	330	1050	1243	420	983	1117	447				Hallam
	171	1220	1253	1300	317	1140	1277	417	1083	1123	473				
	172	1233	1237	1307	347	1050	1227	507	947x 3013 1004	1043	547				Swollen 5-5-
Dup 167 723 green 7809	173	1210	1307	1350	357	1307	1450	580	1260	1407	660	1093	1277	483	Xo
	174	1200	1300	1350	360	1253	1410	467	1127	1343	573	1037	1220	447	
	175	1200	1317	1367	370	1307	1447	593	1140 3527 1176	1333	573	1037	1197	477	
Expmt Dally 14 Dup of 12 Except reduced H one hour unpurified paper alone — Water for washing gave 4.3 24.1 21K2Li | Hood 714 1Af-	176	1217	119.3	1307	437	967	1190	567	880	980	473				Hallam
	177	1223	1180	1300	417	953	1167	527	840	940	457				
	178	1220	1177	1300	393	990	1220	477	897 2617 872	1000	470				
Dup 176 - 719-4.h- 4.4 24- 21K2Li 8144	149	1223	1177	1253	317	980	1127	437	930	1000	510				Hallam
	180	1230	1243	1297	347	1060	1200	450	1003	1103	550				
	181	1220	1243	1283	317	1090	1200	400	1023 2956 985	1127	567				
Dup 176 723 green 4.3 24.1 21K2Li	182	1217	1243	1310	347	977	1173	437	1003	1150	553				Hallam
	183	1200	1227	1307	357	1033	1267	423	1023	1270	560				
	184	1167	1243	1303	323	1087	1273	423	1023 3049 1016	1200	513				

Record How purified

		Cold	50	1/2	H	100	1/2	H	150	1/2	H at				
Purified H — Expmt Dalley 15 — 1A f big lot Ox black no peacock – reduced 6 cc purified hydrogen at 1000 pieces all cleaned. 4 Hours 718 — purified Mg H. chromic acid etc 4.1 24 7424	185	1113	1167	1253	287	933	1190	500	1003	1200	640				Hallcard
	186	1107	1227	1277	287	1057	1250	517	983	1173	573				
	187	1113	1233	1300	323	1043	1230	470	967 2953 984	1150	583				
Dup 185 719 — 4.1 24 7971	188	1083	1110	1190	267	887	1033	370	890	990	390				Hallcard
	189	1100	1167	1240	303	953	1040	343	890	963	417				
	190	1097	1200	1257	280	933	1083	337	917 2697 899	990	327				
Dup 185 723 4.2 24.1 7895 297 [illegible]	191	1090	1230	1293	313	987	1187	347	940	1053	383				Hallcard
	192	1093	1190	1277	300	950	1053	297	893	993	377				
	193	1080	1223	1300	297	987	1100	333	960 2793 931	1060	400				
Expmt 16 Dalley Brittle sheets of flake – separates Easy (69 lbs) ~~Ox~~ Oxidized black no peacock – reduced in unpurified H. wash H2O only — 2 hours at 800 Fahr. flakes were stuck together but separated Easy 718 — 268 21K2&CH. * Screened 13 on 30 mesh flakes would turned over [illegible] 7188	194	1127	1327	1360	367	1260	1377	490	1187	1303	603	1107	1280	553	Co
	195	1133	1320	1343	357	1277	1357	523	1210	1310	703	1133	1287	563	
	196	1130	1343	1367	417	1320	1427	643	1307 1235	1373	843 S	S S 1210	1367	625	
Dup 194 719 4.h. 4.1 24 286 21K2&i 7811	197	1080	1287	1323	350	1353	1413	597	1293	1417	623	1163	1363	543	Co
	198	1097	1297	1337	363	1350	1417	510	1243	1350	540	1150	1300	527	
	199	1097	1290	1323	367	1327	1400	447	1233 3769 1289	1323	520	1133	1287	477	
Dup 194 723 299 4.3 24.1 7724	200	1057	1280	1323		1333	1417	397	1280	1403	450	1210	1400	483	Co
	201	1050	1280	1323		1343	1420	270	1257	1373	383	1150	1347	433	
	202	1033	1257	1300		1300	1383	363	1253 3790 1263	1370	347	1210	1363	457	

* was there Too much fines in it =

	Coll .5					100			150						
Dally Expmt 17 Dup of 16 but 4 hours aft 725. 718— Flakes slightly heavy & turned over	203	1130	1307	1330	373	1333	1400	430	1253	1333	443	1190	1313	497	Co
	204	1127	1287	1317	357	1320	1403	523	1253	1343	497	1183	1327	533	
	205	1123	1290	1323	343	1303	1383	483	1213	1320	557	1163	1303	547	
21K2Li 7433									3719 1239				"		
Dup 203 719 4 h 4.3 24	206	1087	1273	1287	323	1280	1377	463	1190	1313	577	Hopper for Expmt			
	207	1087	1257	1360	307	1257	1360	443	1127	1267	533				
	208	1097	1280	1313	330	1300	1380	517	1167	1297	530				
21K2Li 7803									3484 1161						
Dup 203 723 4.2 24.1	209	1043	1257	1293	330	1310	1387	377	1243	1370	473	1213	1377	507	Co
	210	1043	1280	1327	357	1317	1423	420	1253	1407	500	1230	1383	573	
	211	1033	1257	1293	343	1273	1300	377	1250	1347	467	1220	1400	507	
21K2Li 7799									3746 1249						
Expmt Dally 18 Ni fr No. 70 Tough sheet flake ox black no peacock reduced in 4.1 24 unpurified H₂ only water washing 4 hours 800 deg clean pipe.	212	1130	1303	1337	387	1317	1430	490	1213	1373	607	1190	1380	557	Co
	213	1143	1293	1320	353	1313	1400	453	1243	1353	553	1190	1330	587	
	214	1150	1337	1367	373	1347	1437	497	1250	1373	517	1193	1330	560	
718 — 21K2Li 289 7386									3716 1239						
Dup 212 719 4. h. 4.1 24	215	1067	1257	1297	300	1247	1363	417	1130	1273	483	Hopper for Expmt			
	216	1057	1227	1273	313	1217	1337	347	1123	1250	463				
	217	1077	1257	1297	327	1200	1317	387	1103	1247	510				
21K2Li 291 7866									3356 1118						
Dup 212 723 — 4.1 24.1	218	1040	1257	1303	333	1277	1393	417	1233	1383	1180	1343	473		Co
	219	1020	1233	1280	337	1267	1357	377	1213	1353	1170	1333	410		
	220	1027	1253	1300	393	1310	1410	420	1287	1417	1213	1400	463		
21K2Li 298 7767									3733 1244						

Expmt Dally 19 Dup of 18 Except Reduced H. 800 deg 2 hours RA 718 4.4 24. 21K2 LiOH, 7454	221	1217	1280	1317	383	1283	1383	447	1220	1337	680	1183	1323	500	Co
	222	1227	1310	1350	370	1300	1407	457	1200	1310	597	1170	1323	533	
	223	1223	1287	1327	343	1283	1370	440	1200 1206	1307	600	1177	1313	553	
Dup 221 719 4.4 24 21K2 LiOH 8108	224	1217	1233	1283	273	1227	1323	380	1143	1257	513	Co			
	225	1190	1210	1273	263	1200	1317	270	1120	1233	520				
	226	1197	1250	1303	257	1260	1343	353	1187 3450 1150	1293	490				
Dup 221 Except 723 4.2 24 21K2 LiOH 7789	227	1187	1240	1293	280	1297	1373	273	1257	1347	537	1250	1370	513	Co
	228	1190	1260	1307	277	1297	1400	397	1257	1407	587	1267	1417	567	
	229	1180	1233	1280	253	1283	1340	377	1227 3741 1247	1350	527	1303	1467	613	
RA 733 grossly 4 flakes red 4.1 23.8 porous gritty - 21K2 LiOH, 7742	230	1087	1280	1337	520	1100	1293	517	957	1143	533	Co			
	231	1100	1323	1383	540	1170	1333	527	1010	1143	493				
Dup 230	232	1127		Co											
	233	1100													
RA 734 - grossly cold 4 f- 4.1 23.8 21K2 LiOH 7803	234	1190	1447	1483	603	1287	1450	583	1073	1257	517	Co			
	235	1187	1390	1430	500	1233	1423	480	1057	1173	440				
Cold -	236	1190		Co											
	237	1193													

Ra 735 – greasy old 4 24.1 4.1 21K2Li od. 7864	238 239	1190 1170	1360 1323	1417 1383	477 407	~~1267~~ ~~1073~~	~~1370~~ ~~1297~~	~~453~~ ~~417~~	~~1050~~ ~~953~~	~~1163~~ ~~1093~~	~~483~~ ~~427~~	Co
Cold	240 241	1177 1153		Co								''
Ra 736 - 4.1 23.9 greasy old No4 ff 21K2Li 7886	242 243	1193 1193	1300 1353	1353 1390	380 460	~~1143~~ ~~1287~~	~~1377~~ ~~1440~~	~~490~~ ~~507~~	~~1003~~ ~~1117~~	~~1170~~ ~~1310~~	~~480~~ ~~523~~	Co
Cold	244 245	1197 1190		Co								
Ra 737 greasy 4 4.1 24 21K2Li 7732	246 247	1177 1200	1363 1380	1397 1420	523 510	~~1323~~ ~~1323~~	~~1477~~ ~~1490~~	~~513~~ ~~530~~	~~1073~~ ~~1070~~	~~1320~~ ~~1277~~	~~503~~ ~~457~~	Co
Cold	248 249	1200 1227		Co								
Ra 738 greasy old 4 ff 4.1 23.9 21K2Li 7873	250 251	1200 1163	1333 1343	1380 1363	450 490	~~1240~~ ~~1247~~	~~1397~~ ~~1407~~	~~490~~ ~~490~~	~~1080~~ ~~1040~~	~~1263~~ ~~1183~~	~~477~~ ~~470~~	Co
Cold	252 253	1170 1200		Co								

						100	1/2	H				
Ra 739 4 grossly fl 4.1 23.9 21K2Li 7705	254 255	1200 1217	1367 1450	1437 1490	543 600	1010 1143	1213 1337	397 393	880 983	950 1280	397 380	Expt Hoopes –
Cold	256 257	1190 1213	Co									
Dally Expt 20 "flake" 69 – Br 11 Ko fl ox black no pk [illegible] reduced purified H – 2 hours 800 paper clean 1 hour 12 on 30 mesh 4.2 24 718 21K2Li Heavy flakes [illegible] Hopper grinds [illegible] 7385	258 259 260	1200 1197 1190	1373 1327 1350	1400 1363 1383	330 333 367	1277 1250 1267	1367 1330 1350	497 480 493	1167 1117 1117	1307 1287 1267	310 350 383	Co
Dup 258 – Except 719-4-h 21K2Li 4.2 24 8075	261 262 263	1197 1177 1187	1243 1260 1263	1337 1313 1313	310 350 347	1200 1217 1220	137 1297 1317	447 447 450	1067 1117 1120	1233 1240 1267	360 397 393	Reran Co
Dup 258 723g 4.5 24 21K2Li 7158	264 265 266	1160 1143 1143	1230 1220 1220	1267 1260 1250	317 297 290	1267 1257 1257	1343 1347 1347	440 453 463	1217 1260 1217	1327 1333 1327	407 390 423	Co
Expt 21 Dally Dup of 20 Except 4 hours 800, Reded H. flake slightly stuck separately [illegible] 4.5 24 21K2Li 7326	267 268 269	1177 1160 1167	1280 1257 1277	1310 1287 1300	347 327 267	1277 1250 1237	1367 1327 1320	587 603 507	1197 1197 1133	1333 1303 1283	573 517 450	Co

Dup 267 719 4.24 21K2Li	8054	270	1197	1223	1280	260	1183	1323	497	1067	1227	443		[illegible]	
		271	1197	1230	1290	270	1200	1323	467	1067	1223	430		Co	
		272	1200	1223	1293	290	1173	1313	483	1223	1290	423			
Dup 267 723 4.5 24 21K2Li	7764	273	1177	1253	1307	273	1287	1387	553	1277	1410	450	1313	1500	613
		274	1170	1277	1320	350	1320	1407	563	1317	1433	403	1290	1440	650
		275	1143	1200	1263	287	1260	1357	493	1230	1360	393	1210	1383	593
RA 745 – 4.1 gravity 4 fl 24 21K2Li	7730	276	1240	1190	1283	307	980	1173	510						
		277	1220	1253	1350	387	1037	1233	510						
										273	250 1283	1433	627	300 1253	1400	483
										274	1250	1390	587	1247	1383	490
										275	1190	1327	570	1190	1317	433
Dup 276 Cold		278		Co											
		279													
Dully Except 22 Trough fl No 70 – Ox black no peaked rided purified fl. 2 hours 800 deg flake slightly black separate Emery paper clean 4.1 24 21K2Li	7452	280	1213	1267	1313	363	1247	1367	533	1197	1333	440			
		281	1217	1277	1317	353	1253	1353	503	1150	1297	423		Co	
		282	1200	1280	1317	383	1257	1360	447	1133 3480 160	1313	393			
Dup 280 except 719 4 h ghr 23.9 – f 4.1 21K2Li off.		283	1147	1167	1230	337	1170	1267	393	1067	1240	367			
		284	1143	1143	1197	283	1123	1197	350	1093	1200	323		Co	
		285	1170	1193	1250	380	1157	1273	410	1117 3277 1092	1260	393			
Dup 280 Except 723 4.1 24 21K2Li off		286	1153	1220	1267		1227	1316	387	1197	1310	447	1210	1323	523
		287	1160	1227	1277		1240	1320	390	1230	1333	407	1247	1363	547
		288	1167	1227	1277		1237	1323	340	1197	1333	440	1183	1360	560
										286	250 1190	1263	543	300 1193	1270	467
										287	1220	1310	547	1230	1310	530
										288	1180	1338	530	1163	1310	583

		Cold													
Expt 23 Dally – Dup 22 Except reduced H 4 hours at 800 flake black, separated Easy paper clean – flaky 718 green 4.1 24	289	1223	1277	1313	427	1170	1273	397	1113	1257	567				Co
	290	1223	1273	1323	453	1123	1283	383	1067	1220	517				
	291	1237	1297	1337	433	1133	1283	390	1113	1220	503				
									3293 1098						
Dup 289 719 – 4.1 23.9 21K2Li	292	1200	1230	1290	393	1000	1133	333	1067	1313	503	1010	1153	537	Co
	293	1177	1193	1250	340	1100	1223	343	1067	1230	497	1050	1173	493	
	294	1200	1227	1283	390	1123	1237	390	1133	1320	593	1100	1237	497	
									3267 1089						
Dup 289 723 4.1 24 21K2Li	295	1200	1240	1287	357	1240	1330	390	1170	1313	507	1173	1330	547	Co
	296	1160	1227	1273	357	1253	1340	368	1193	1333	523	1200	1340	567	
	297	1143	1193	1243	340	1220	1303	403	1163	1303	463	1177	1323	540	
									3529 1176						
Expt 24 Dally Dup of 15 pan Except reduced H 2 hours at 1000 paper clean 718 green 24 – 4.4 flake flaky – 21K2Li Chromatog. purified.	298	1177	1230	1303	420	887	1107	460							Co
	299	1180	1227	1317	393	847	1017	410							
	300	1187	1227	1310	400	883	1033	363							
Dup 298 719-4 h 4.4 23.9 21K2Li Chromatog. purified.	301	1200	1130	1230	367	847	923	373							Co
	302	1193	1267	1317	390	940	1083	397							
	303	1160	1243	1303	443	940	1120	413							
Dup 298 723 – 4.2 24 21K2Li	304	1190	1267	1310	437	1140	1267	437							Co
	305	1190	1280	1320	433	1173	1310	483							
	306	1200	1323	1363	480	1200	1333	520							
Dally Expt 25 flake 1A – Ox black no peak reduced purified H 4 hours 800 fl. slightly black Separates Easy paper clean 718 4.2 24 21K2Li 1000	307	1227	1377	1413	517	1313	1420	560	1127	1317	417				Co
	308	1283	1280	1330	393	1167	1360	477	1097	1233	413				
	309	1227	1303	1350	427	1200	1367	430	1120	1280	403				

Dep 307 Except 719-4 h 4.2 23.7 21K2Li	310	1217	1250	1297	377	1157	1307	367	1063	1253	400	Co
	311	1230	1247	1307	357	1153	1293	410	1033	1187	413	
	312	1213	1207	1273	333	1113	1273	350	1017	1170	440	
Dep 307 723- 4.1 24	313	1207	1237	1287	352	1267	1390	367	1170	1333	487	Co
	314	1197	1243	1280	317	1320	1407	317	1217	1343	480	
	315	1217	1257	1317	420	1300	1450	390	1217	1360	523	
Dally 26, Dep of 25 Except reclaimed 2 hours 800 718- 41 24 fbacky 21K2Li	316	1200	1283	1333	193	1283	1400	417	1133	1283	380	Co
	317	1220	1287	1330	450	1217	1357	400	1117	1293	450	
	318	1220	1317	1360	463	1253	1363	343	1193	1327	440	
Dep 316 719-4 h 4.1 23.9 21K2Li.od	319	1183	1233	1280	310	1200	1300	340	1113	1250	427	Co
	320	1177	1217	1283	340	1157	1293	323	1050	1250	377	
	321	1197	1267	1303	273	1267	1343	353	1173	1297	383	
Dep 316 723- 4.2 24. 21K2Li	322	1167	1217	1273	433	1287	1367	417	1227	1343	400	Co
	323	1187	1217	1273	463	1313	1383	393	1253	1360	363	
	324	1173	1200	1253	373	1257	1333	320	1230	1330	340	
	325	1223	1287	1330	433	1267	1373	437	1133	1303	473	Co
	326	1210	1267	1323	447	1230	1357	440	1150	1310	450	
	327	1205	1213	1360	400	1157	1277	387	1090	1223	523	

		Cold	50			100									
	328	1193	127	1283	333	1200	1317	317	1093	1223	390				Co
	329	1200	1223	1293	313	1200	1300	360	1113	1283	430				
	330	1190	1220	1290	300	1217	1340	377	1150	1283	460				
	331	1170	1243	1300	253	1287	1377	383	1220	1363	483				
	332	1173	1250	1313	343	1363	1413	387	1247	1373	447				
	333	1173	1250	1310	373	1310	1400	360	1240	1383	443				
	334	1193	1220	1273	447	1260	1350	400	1177	1310	460				
	335	1190	1263	1313	470	1290	1380	477	1187	1323	467				
	336	1200	1247	1307	527	1283	1367	467	1240	1347	467				
	337	1167	1190	1263	460	1213	1323	373	1133	1260	387				Co
	338	1170	1193	1263	467	1230	1388	380	1160	1280	363				
	339	1173	1200	1280	533	1213	1347	423	1133	1287	430				
	340	1143	1233	1303	487	1310	1410	413	1297	1397	413	1277	1407	340	Co
	341	1173	1217	1280	450	1293	1377	423	1257	1373	383	1227	1367	403	
	342	1147	1200	1273	407	1277	1377	387	1227	1353	383	1227	1347	417	
419 4 h NO4 fl 4.3 23.9 : 3 LiOH 21K	343	1220	1247	1327	580	1183	1333	370	400	1217	517				Co
	344	1243	1277	1353	617	1133	1307	547	567	1100	633				
719 4 h NO4 fl 4 LiOH 21 KOH	345	1250	1247	1337	663	1083	1270	387	540	1257	857				Co
	346	1233	1160	1343	653	1093	1330	700	503	1257	840				

	2 Rings	Cold	50	Slightly Split		100						
719 4 h NO4 fc 5 LiOH 21K	347 348	1243 1213	1213 1177	1350 1367	767 713	1080 1153	1267 1353	797 887	400 470	1247 1320	1013 1073	Co
719 4 h NO4 fc 6 LiOH 21K	349 350	1200 1193	1013 x 1120	1237 1370	773 747	1047 1130	1183 1367	S 1R 917 983	457 390	973 1117	950 1000	Co
719 4 h NO4 fc 7 LiOH 21K	351 352	1200 1200	933 x 1177	1163 1300	910 917	587 723	650 937	Swell split 687 3R 897				
719 4 h NO4 fc 8 LiOH 21K	353 354	1193 1197	1067 987	1263 1130	967 923	580 480	707 507	S 1R 880 610				
719 4 h NO4 fc 9 LiOH 21K	355 356	1167 1163	987 857	1157 1017	947 900	477 413	513 427	Swell 1R 603 Swell split 1R 373				
719 4 h NO4 fc 10 LiOH 21K	357 358	1163 1133	753 667 x	1137 853	937 723	13 13	403 347	Swell 4R 367 Swell split 2R 313				
719 4 h NO4 fc Saturated LiOH 21K	359 360	1110 1140	33 x 77 x	550 420	643 493							
Dully (Af ox black rinsed in round) put 3 hrs in purified H. 2 R swelled slightly split 3 R — "	361 362 363	1220 1200 1217	1217 1287 1277	1310 1300 1333	533 503 533	1253 1277 1257	1350 1367 1350	397 457 407	1140 1220 1167	1287 1347 1310	317 467 470	Co

S on S swelled

						100	1/2	H				
Dup of 361 Except 719 4 h 4.1 2319	364	1200	1217	1293	413	1197	1300	357	1130	1290	430	Co
	365	1213	1243	1300	400	1220	1300	417	1140	1273	460	
	366	1197	1217	1283	377	1217	1340	497	1170	1340	423	
Dup ~~360~~ 361 723 greens 4.11 24	367	1190	1250	1313	373	1290	1383	510	1233	1387	473	Co
	368	1180	1250	1313	377	1300	1383	507	1257	1370	473	
	369	1200	1313	1357	387	1350	1440	607	1283	1423	543	
Ra 740 greenings 4 fl 4.3 23.8	370	1250	1303	1373	407	1157	1347	670	983	1190	563	Co
	371	1260	1273	1370	383	1113	1313	630	963	1183	533	
	372	1270	1141	1257	360	967	1197	580	867	1027	543	
Ra 741. No 4 greenings flake — 4.5.24.	373	1150	1260	1300	330	1180	1347	507	1007	1250	587	Co
	374	1197	1257	1317	370	1217	1367	587	1033	1257	587	
	375	1193	1267	1343	380	1217	1383	620	1020	1267	557	
Ra 742 green dried in deep pans Greenings No 4 f - 4.3 24. green slightly darker than regular	376	1283	1377	1437	313	1223	1400	593	1643	1250	550	Co
	377	1257	1350	1407	320	1217	1367	527	1030	1193	483	
	378	1270	1350	1403	less than 233	1123	1300	453	933	1173	460	
Ra 742 greenings 4 fl 4.3 24.	379	1237	1303	1360	327	1113 x	1300	507	940	1087	443	Co
	380	1233	1317	1367	323	1167	1330	550	970	1167	500	
	381	1300	1323	1400	357	1217	1363	613	1037	1193	527	

I.R.

S S

			50	½	Hot							
Ra 743 greasy No 4 fl 4.5 23.9 –	382	1267	1337	1390	343	1300	1423	617	1147	1323	527	Co
	383	1243	1300	1370	277	1240	1380	577	1023	1247	510	
	384	1250	1313	1377	337	1250	1383	553	1087	1257	507	
Ra 744 greasy No 4 f 4.5 24.1	385	1243	1300	1407	420	1273	1460	233 S	1067	1263	487	Co
	386	1250	1343	1410	467	1273	1400	547	1080	1263	500	
	387	1253	1333	1410	543	1300	1423	583	1120	1303	530	
Nickelly fm Vacuum Dryer Batch No 4.5 — 4.3 23.8 greasy No 4 fl before screening was porous & spongy looking but then screen by crushing by hand bulky –	388	1187	1213	1300	533	1083	1267	517	900	1083	433	Co
	389	1200	1223	1320	440	1133	1317	540	943	1147	473	
	390	1200	1183	1293	423	1123	1346	603	963	1063	500	
Ra 731 greasy No 4 4.3 24 –	391	1183	990	1167	417	953	1077	553	830	947	460	Co
	392	1213	973	1150	377	933	1110	577	827	933	490	
	393	1207	1067	1210	423	970	1133	553	867	997	550	
Ra 731 N – 4.5 23.9 greasy No 4 f	394	1007	1140	1210	510	1123	1257	620	980	1197	640	Co
	395	1007	1140	1210	527	1133	1300	713	1050	1233	600	
	396	1027	1113	1207	523	1107	1257	713	993	1153	610	
Ra 731 I greasy No 4 fl 4.5 24.1	397	1197	1223	1290	473	1177	1267	643	1000	1160	480	Co
	398	1197	1150	1237	507	1133	1250	647	920	1023	520	
	399	1180	1047	1183	476	910	1120	573	793	930	417	

Ra 731. J. 4.5 24.2 grissly 4 ft	400	1047	1183	1263	583	1167	1257	643	950	1113	517	Co
	401	1040	1183	1237	477	1133	1267	450	970	1117	387	
	402	943	1123	1193	470	957	1177	493	823	980	393	
RA 731 K 4.3 23.8 grissly, No 4 ft	403	1063	1193	1263	410	1057	1217	503	977	1067	367	Co
	404	1050	1223	1287	333	1107	1267	543	973	1077	357	
	405	993	1117	1200	370	1093	1250	660	930	1057	457	
Dry Nickel Ni precip by Magnesia -	406	1	1			Co						
Dup 406 Except 5 grms 719 + 1.216 grm precip metallic Ni	407	117	127	130	107	Co						
RA 731 O. grissly 4 ft 4.3 24.1	408	1013	900	1077	653	907	1057	750	813	980	603	Co
	409	1023	927	1063	710	933	1103	800	833	1017	670	
	410	997	993	1097	790	967	1130	753	867	1073	637	
719 4 h 21 K Saturated ~~[illegible]~~ with Caustic Lime 6 grms each cell	411	1123	1050	1233	250	Co						
	412	1113	993	1213	233							
719-4 h - 21 KOH saturated 6 grms Caustic Strontia Each cell	413	1220	1113	1167	427	Co						
	414	1133	1250	1267	213							
719 4 h 21 KOH Saturated Caustic Baryta 6 grms Each cell	415	1123	1153	1170	193	Co						
	416	1097	1117	1133	173							

719-4 h 6 grams Caustic Baryta 1% KOH, then 3%	417 418	0 0 0				Co										
719-4 h 6 grams Caustic Lime 1% KOH, then 3%	419 420	1040 1040	713 823	1140 1133	167 160	C										
719-4 h 6 grams Caustic Strontia + 1% KOH then 3%	421 422	983 1177	1243 1077	1277 1140	160 213	Co										
719-4 h Saturated LiOH) with Excess LiOH, run cold 4 times Empty pail in 21 K run 4 times, then on hot	423 424	1180 1187	1333 1333	1370 1380	313 347		1280 1277	1313 1333	263 260	1220 1190	1270 1233	360 347	1167 1133	1200 1170	280 283	Co
719 4 h Saturated LiOH, then 3 grams Caustic Lime, Run Cold 3 times then change sol to 21 K	425 426	1260 1290	1320 1340	1420 1440	363 353		1263 1250	1363 1360	297 300	1170 1210	1260 1260	377 367	1120 1150	1187 1183	300 310	Co
														Notice difference		
Dup 425 Except 3 grams Caustic Baryta 719 6.91 gram	427 428	1267 1267	1400 1410	1447 1457	393 380		1350 1357	1400 1413	330 307	1273 1250	1327 1300	390 340	1213 1190	~~1253~~ ~~1220~~	~~323~~ 320	Co
Dup 425 Except 3 grams Caustic Strontia.	429 430	1247 1267	1393 1393	1441 1450	327 357		1413 1390	1443 1433	313 323	1357 1337	1363 1377	363 333	1253 1270	1287 1303	427 383	Co
719-4 h - dip saturated LiOH, Tube dipped then [illegible] in 21 K on current quick	431 432	1163 1123	1233 1217	1250 1233	250 233	G										

719-4 h- Dip tube saturated LiOH. 1 hour – put in 21% + put on current pre ok 5 hrs cold	431 432					
RA 747 4.1 24 21K2 LiOH.	433 434. 435	1100 1060 1077	1127 1153 1143	1153 1183 1167	360 377 370	Co
7189 1 Af ox + annealed flake flat. bright on 1 side & dull on other. buckley 21K2 LiOH.	436 437	1183 1160	1260 1213	1277 1247	383 387	Co
Dup 436- 719- 4.1 23.9	438 439	1147 1130	1217 1257	1267 1317	270 410	Co
Dup 436 723 4.1 24.2 21K2 LiOH	440 441	1127 1127	1240 1240	1300 1310	457 417	Co
93f not ox run in H made from non gas passing thru H2O saturated with H5 gas not purified 719 23.9 4 21K2 LiOH.	442 443 444	1150 1133 1153	1180 1087 1060	1257 1183 1183	393 370 297	Co
Dup 442 723 4 .24.	445 446 447	1117 1143 1017	1027 1133 1047	1157 1240 1110	307 337 367	Co

			50.	1/2	H	100	1/2	H	150	1/2	dlof			
73 f nat ox treated with Dry ammonia gas about 800 deg 723 24. 4 21 K2 LiOH.	448	1167	1213	1267	350	1267	1343	427	1307	1400	533	1287	1413	623
	449	1170	1237	1283	367	1290	1353	460	1317	1393	570	1293	1397	667
	450	1197	1237	1290	350	1267	1347	507	1310	1410	580	1293	1427	690
Dup 448 719	451	1183	1213	1267	320	1243	1320	493	1253	1350	523	1217	1360	600
	452	1183	1227	1267	300	1267	1330	520	1260	1360	533	1213	1330	683
	453	1160	1187	1247	287	1223	1287	530	1253	1347	523	1257	1360	553
10 A Ni fl for Rogers 719. 4 — 23.9 4.2	~~454~~	~~1067~~	~~1100~~	~~1163~~	~~313~~									
	~~455~~	~~1067~~	~~1067~~	~~1150~~	~~297~~		Co							
	~~456~~	~~1087~~	~~1067~~	~~1133~~	~~300~~									
Dup 454 718 4.2 23.8	~~457~~	~~1173~~	~~1197~~	~~1233~~	~~357~~									
	~~458~~	~~1157~~	~~1183~~	~~1227~~	~~370~~		Co							
	~~459~~	~~1170~~	~~1210~~	~~1243~~	~~397~~									
Dup 454 723 4.2 24	~~460~~	~~1123~~	~~1133~~	~~1200~~	~~330~~									
	~~461~~	~~1163~~	~~1163~~	~~1213~~	~~287~~		Co							
	~~462~~	~~1153~~	~~1153~~	~~1210~~	~~287~~									
73 f nat OX boiled in Molten red hot KCy in iron crucible — too much iron in fl. couldnt get it all out by HCP — blocked together lead color fl 723	~~463~~	~~863~~	~~943~~	~~957~~	~~320~~									
	~~464~~	~~820~~	~~930~~	~~943~~	~~260~~		Co							
	~~465~~	~~863~~	~~957~~	~~973~~	~~267~~									

	A		50	1/2	H	100	1/2	H	150	1/2	Hot	200	1/2		250		
Dup 463 719 4.1 23.9	~~466~~	~~750~~	~~840~~	~~853~~	~~253~~	Co											
	~~467~~	~~700~~	~~793~~	~~810~~	~~190~~												
	~~468~~	~~750~~	~~840~~	~~850~~	~~213~~												
Ra 719 4 73 ni fl not ox run at about 900 in City gas. 4.2 23.9	~~469~~	~~1237~~	~~1227~~	~~1297~~	~~280~~	Co											
	~~470~~	~~1240~~	~~1190~~	~~1283~~	~~267~~												
	~~471~~	~~1197~~	~~1180~~	~~1260~~	~~273~~												
Dup 469 723. 4.2 24	~~472~~	~~1240~~	~~1263~~	~~1330~~	~~267~~	Co											
	~~473~~	~~1237~~	~~1257~~	~~1320~~	~~313~~												
	~~474~~	~~1210~~	~~1227~~	~~1297~~	~~257~~												
Ra 723 ni fl breakdt not ox $BiCl_3$ NH_4Cl Conc reduced Bi on flake, steel Color washed with ammon chl. 4.3 24 6.589 grams	475	1197	1393	1557	707	1387	1563	933	1427	1657	1007						
	476	1210	1410	1557	727	1400	1573	960	1463	1660	1043						
	477	1190	1390	1537	543	1417	1577	983	1463	1627	1000						
Dup 475 719 4 4.3 23.9	478	1220	1400	1563	670	1400	1577	1107	1387	1613	1017	1450	1633	1073	1420	1603	1150
	479	1217	1393	1573	643	1410	1560	1113	1400	1617	1057	1483	1667	1130	1423	1623	1160
	480	1233	1440	1577	590	1430	1597	1100	1467	1660	1110	1490	1740	1140	1507	1687	1060
No 1 stock ni f fm Bailey Co not ox but ammoniated H — 4.1 24.1	481	1133	1147	1253	250												
	482	1170	1213	1250	317												
	483	1157	1163	1260	320												

3/43/14.4

Dup 481 723 24. 4.1	484	1133	1180	1253	250
	485	1153	1183	1250	317
	486	1153	1197	1260	320
Stock 17 A f fm battery Co Oxidized & annealed 723 4.3 24.1	487	1133	1170	1233	310
	488	1110	1170	1243	333
	489	1153	1197	1257	353
Dup 487 719	490	1153	1183	1237	297
	491	1170	1183	1240	297
	492	1170	1183	1237	293
Buffalo foundry Co Vacuum dried percolated 4.1 24 Darker color than reg green	493	1143	1247	1320	347
	494	1167	1243	1313	310
	495	1173	1237	1330	360
~~[illegible]~~ 719 4 h 24.1 4.2	496	1193	1250	1310	293
	497	1180	1263	1333	343
Dup 496 Except 723 green 4.3 24	498	1173	1263	1323	317
	499	1177	1273	1333	283
723 green 21 K 3 grams Lithium Carbonate Each cell —	500	1067	1170	1200	277
	501	1047	1143	1163	260
	502	1073	1197	1223	297

Co

Co

Co

Co

See Walter what is this
Co

Co

Co

Dup 500 Except 719-4 21K 3 gm Lith Carb.	503	1083	1197	1213	263
	504	1067	1160	1183	280
	505	1083	1197	1223	287
719-4 4 grinding	506	1143	1217	1253	
	507	1150	1217	1267	
	508	1153	1243	1303	
flake 73 not ox not Hydrogen in Hot KCy in Clay Crucible free Fe 719	509	1140	1230	1287	280
	510	1150	1217	1263	290
	511	1103	1157	1210	260
Dup 509 723	512	1140	1187	1243	270
	513	1137	1177	1240	250
	514	1120	1177	1230	213
Old 9920. Seam opened put on tighter ring, that forced seam back- ½ rate 33% K H Li -	515	980			
	515³				
No 2 A unf ox- thru H — 719 — flake quite some stuck together	516	1183	1310	1350	320
	517	1147	1237	1300	303
	518	1147	1243	1313	297
Dup 516 723 —	519	1173	1317	1363	287
	520	1167	1277	1343	293
	521	1183	1330	1387	307

Co

Ce

Co

Co

No good —

Big regeneration —

1283	1340	573	Co
1233	1310	517	
1243	1323	477	
1327	1407	447	Ce
1297	1387	383	
1350	1450	383	

		Cold	50	1/2	Hot	100	1/2	H	150	1/2	H	200	1/2	H	
Stock 18A 16A 3A + 1A. ox + annealed - 719-4	522	1113	1227	1270	247	1193	1477	320		Co	524 26 27	250 1413 1320 1293	1467 1367 1340	483 1010 1059	
	523	1163	1260	1320	297	1240	1323	363							
	524	1173	1273	1350	307	1280	1377	407							
734 grain soaked 20 min in Conc BiCl3 NH4Cl all free liquid poured out then dried + put in KOH + heated several hours then washed decantation until nearly free Chloride. dried well reversed - 10 lb hat. No4 flake · 4.2 24 - 21K2 LiOH 8213	525	1140	1350	1363	883	1247	1267	1097	1337	1377	1120	1350	1403	933	Ext
	526	1147	1293	1343	1053	1237	1253	1137	1290	1333	1123	1153	1230	1197	
	527	1147	1300	1327	1023	1243	1263	1173	1393	1437	1090	1320	1383	1120	
719 treated one week Lithium hypochlorite with free LiOH - washed well 21K2 LiOH. No4 flake	528	1147	1293	1350	363	1263	1353	593		Co					Co
	529	1133	1237	1293	333	1220	1297	540							
	530	1133	1273	1320	383	1260	1350	587							
Dup 528 but 734 grain used	531	1163	1310	1367	340	1330	1417	553		Co		540 41 42	250 1193 1167 1173	1373 1350 1377	610 567 597
	532	1163	1300	1363	360	1307	1383	523							
	533	1163	1310	1367	357	1333	1427	493							
Dup 522 Except 723 used	534	1133	1230	1283	267	1220	1300	463		Co	537 38 39	250 1193 1193 1217	1433 1417 1437	623 603 587	Co
	535	1137	1237	1307	270	1257	1340	343							
	536	1130	1233	1303	257	1260	1340	400							
Stock 2A not ox but LiOH. 723 -	537	1197	1320	1387	323	1347	1450	467	1293	1457	450	1333	1487	600	Co
	538	1183	1287	1357	290	1313	1417	403	1293	1417	473	1283	1473	620	
	539	1173	1287	1360	347	1320	1400	393	1293	1407	463	1333	1473	620	
Dup 537 719 -	540	1187	1287	1360	370	1293	1383	437	1237	1370	477	1270	1413	617	
	541	1163	1243	1307	340	1240	1327	400	1227	1347	383	1220	1367	507	
	542	1183	1273	1333	367	1270	1363	433	1227	1353	497	1227	1397	533	

		Cold	50	1/2	Hot	100	1/2	Hot	150	1/2	H	~~200~~ 250	1/2	H
Ra 748 — 4ft granular	543	1133	1317	1353	413	1333	1420	520			556	1193	1340	500
	544	1140	1307	1347	370	1297	1377	487			557	1143	1317	507
	545	1140	1320	1360	383	1310	1393	540			558	1183	1340	510
											559	1167	1313	490
											560	1153	1327	503
734 fc Bismuth green without fc Re	546										561	1153	1340	553
No 66 + 94 flake not ox but thru H — 419-4 —	547	1147	1227	1283	230	1187	1257	473						
	548	1190	1257	1320	270	1240	1297	513						
	549	1130	1207	1263	280	1183	1253	497				250		
Dup 547 723	550	1133	1240	1320	307	1223	1307	497			553	1290	1433	373
	551	1160	1233	1320	367	1240	1323	480			554	1340	1483	457
	552	1197	1317	1390	370	1307	1387	507			555	1273	1423	467
Sample 106 20A Slick Sheared (flake separated) — Crack propeller not OX or Thru H.— [illegible] — 723 thickest flake overhead, had change [illegible] —	553	1090	1167	1250	300	1163	1270	373	1233	1367	513	1237	1433	367
	554	1100	1177	1253	287	1163	1283	403	1263	1390	540	1270	1463	447
	555	1087	1173	1263	260	1163	1273	407	1243	1377	483	1210	1417	467
Dup 553 719 + h	556	1100	1173	1250	230	1133	1247	377	1193	1363	450	1187	1327	490
	557	1093	1150	1240	260	1120	1223	377	1157	1280	477	1133	1307	513
	558	1107	1167	1243	243	1133	1240	347	1187	1313	413	1163	1323	550
14 A f not ox, thru H. 723 ·	559	1150	1217	1277	283	1187	1270	390	1253	1353	177	1207	1347	430
	560	1123	1180	1250	260	1160	1260	333	1207	1317	422	1167	1330	603
	561	1127	1180	1250	290	1167	1287	333	1233	1377	387	1187	1353	627

			50	½	H	100	½	Hal				200	½	Haf
Dup 559 719 4 h	562	1140	1197	1250	243	1133	1227	327						
	563	1137	1197	1253	157	1133	1227	250		Co				
	564	1177	1247	1300	230	1197	1287	303						
718 green 20A sheared ff not off on thrott. washed distilled H_2O salmon ok 21K 3 LiOH. chge dis twice at 1/4 regrate then chge salt to 21K 2 LiOH. run 3 times regrate then on heat Most bulky flake ever had loading cot 448. had change hopper screw –	565	1150	1303	1350	300	1320	1383	347	1293	1407	507	1307	1383	447
	566	1107	1253	1313	303	1263	1387	370	1237	1393	533	1283	1377	653
Dup 565 719 – 4 – 24	567	1083	1237	1317	287	1263	1350	300	1237	1391	537	1290	1413	433
	568	1103	1250	1340	287	1263	1350	350	1243	1400	583	1290	1413	490
Dup 565 723 4 24	569	1103	1233	1330	317	1287	1363	353	1273	1423	577	1333	1453	483
	570	1070	1200	1310	320	1243	1333	333	1213	1387	540	1280	1413	487
Dup 565 Ra 734 gr Containing 16.8% Bismuth 10 lb Lot 4. 23.9.	571	1183	1467	1523	643	1500	1527	513	1497	1530	1227	1417	1443	963
	572	1177	1393	1423	900	1287	1320	730	1400	1430	1140	1400	1427	750
718 Sheared flake No 106-20A Slick — 1st 2 Chg [illegible] in 21K 4 LiOH. 1/4 Regrate then Change To 21K 2 LiOH. 4 24	573	1133	1267	1323	483	1287	1343	507	1273	1393	687	1320	1420	577
	574	1117	1253	1323	453	1263	1333	447	1243	1367	663	1280	1390	553
Dup 573 719	575	1097	1223	1343	397	1263	1360	413	1237	1393	610	1280	1400	473
	576	1093	1237	1330	367	1263	1343	370	1233	1383	637	1257	1390	470

Badly bent

Cut

Badly bent

			50	1/2	H	100	1/2	H	150	1/2	H			
Dup 573 723 4 24.1	577 578	1070 1070	1217 1217	1320 1320	370 397	1263 1270	1353 1367	1273 1253	1427 1427	677 683		1323 1327	1457 1477	523 527
Dup 573 734 green 16.8% Bismuth 4 23.9	579 580	1200 1193	1447 1446	1497 1537	667 630	1433 1427	1470 1453	660 677	1443 1450	1477 1477	1173 1183	1313 1297	1360 1323	1013 1020
718-Sheared ff 106 20A stock 1st 2 chgs in 21K 6 LiOH. 1/4 reg rate after change to 21K 2 LiOH 4.24	581 582	1127 1133	1260 1267	1333 1333	540 467	1280 1287	1357 1360	683 583	1273 1277	1420 1390	770 690	1363 1303	1473 1417	677 610
Dup 581 719	583 584	1120 1147	1267 1267	1373 1363	343 343	1287 1300	1393 1397	490 477	1250 1277	1417 1430	607 600	1290 1310	1427 1427	563 550
Dup 581 723	585 586	1143 1100	1283 1243	1377 1353	403 417	1320 1287	1403 1383	493 497	1293 1250	1450 1427	637 550	1323 1303	1467 1433	580 497
Dup 581 734 16.8% Bismuth 4 23.9	587 588	1283 1297	1467 1457	1497 1487	1067 1030	1413 1353	1453 1397	673 837	1420 1430	1453 1453	1100 1073	1260 1323	1303 1353	1050 933
718 Sheared ff 106 20A stock Chgs dur twice 21K 8 LiOH. 1/4 reg rate then change to 21K 2 LiOH. run reg rate	589 590	1133 1133	1277 1267	1340 1330	670 630	1277 1273	1353 1347	707 593	1267 1250	1400 1377	627 623	1287 1287	1400 1377	523 607
Dup 589 719	591 592	1163 1133	1313 1293	1417 1397	517 503	1350 1327	1453 1417	627 623	1357 1297	1483 1453	587 633	1360 1333	1467 1467	587 560

Bad bent split 2R	Bad bent		Bent					Bent	150	½	H	200	½	H	
Dup 589 723.	593 594	1117 1163	1287 1323	1417 1430	543 723	1340 1400	1447 1480	493 533	1297 1383	1493 1523	627 693	1353 1380	1520 1577	573 657	
Dup 589 734 16.8% Bismuth.	595 596	1320 1320	1440 1440	1463 1463	993 1033	1400 1433	1433 1473	677 667	1443 1443	1467 1477	1060 1100	1287 1320	1317 1350	1083 977	Bent
723- Sheared fl- run twice 1/4 rate 33% R 4 L10H. then change sol to 21R 2 L10H. + reg rate	597 598	1160 1170	1247 1250	1313 1317	537 650										
Dup 597 719	599 600	1140 1117	1247 1200	1310 1263	637 703	1297 1260	1367 1343	483 517	Bad bent Bad bent split 1R broken						
Dup 553 & A in melt. Except 718-	601 602 603	1207 1203 1177	1250 1230 1167	1290 1267 1210	703 593 488										
734 16.8 Bismuth No 4 fl Reverse 10 hours at 1/4 rate then Chg. dischg 1/4 rate twice then 3 times reg rate 21R 2 L10H.	604 605	1167 1210	1483 1433	1490 1450	697 660	1353 1427	1427 1453	1013 827	1370 1397	1393 1423	1197 1223	1183 1207	1213 1247	1000 997	
723-Sheared fl- not extra 3 mils of Each dump 293 dump 21R 2 L10H- 6.730 grm	606 607	1240 1233	1313 1300	1353 1330	440 423	1400 1363	1463 1407	503 560	1400 1363	1510 1457	657 650	1437 1410	1537 1497	517 517	
723 Dup 606 2 mils fl Each dump 309 Dump 6.941 grm	608 609	1257 1260	1350 1350	1393 1383	453 410	1400 1410	1453 1463	590 660	1363 1460	1473 1573	647 537	1433 1433	1530 1553	490 493	

723 – Screen out all fine dust by 1120 mesh 4 greenly fl – 4 24.	610	1230	1293	1333	387	Co
	611	1223	1293	1333	403	
Stock A 18 – Lot 101 nif not ox – thru H – 719 – only enough for 4 tubes. Hockey Cavity	612	1080	1100	1160	343	Co
	613	1110	1127	1180	403	
Dup 612 723	614	1103	1140	1207	420	Co
	615	1083	1120	1183	417	
Lot 61 Stock 6 A nif not ox but thru H – 719	616	1157	1153	1217	493	Co
	617	1157	1183	1247	463	
723 Dup 616 A.	618	1133	1190	1243	413	Co
	619	1133	1213	1273	417	
Lot 65 Stock A, nif not ox but thru H – 723 4.3 24.1	620	1130	1153	1217	377	Co
	621	1160	1230	1273	397	
Dup 620 A. 719	622	1157	1183	1237	343	Co
	623	1143	1153	1207	357	

							150	½	H
5A 17A n.i.f not ox but clumps. 719 slightly curling tacky	624 625	1153 1100	1167 1093	1213 1153	363 340	Co			
Dup 624 A. 4.2 24 723	626 627	1123 1133	1170 1167	1230 1227	357 353	Co			
Ra 749 - No 4 granule 4.1 23.8	628 629	1100 1117							
Ra 749 Dried with air dryer (new) — No 4 granule slightly darkened color spongy green slightly [illegible] 4.1 23.8	630 631	1133 1153	1223 1207	1247 1233	447 400	Co	1053 1050	1237 1230	547 450
719-4-h 4 granule - 33% K 4 LiOH. once ½ ratio charge [illegible] remove sol. put in 21 K 2 Li Rerunning	632 633	1067 1183	830 × 1057	897 1130	437 433	Co			
Dup 632 723	634 635	1173 1233	1117 × 1067	1163 1150	500 460				
Ra 723 No 4 granule Run twice 33% 4 LiOH - remove sol. & put 21 K 2 Li	636 637		1030 1140	1093 1180	427 387	Co			
Dup 636 719—	638 639		1010 1117	1067 1160	310 318	Co			

Swelled S-S 4 Rings

Swelled 1R

See Book 7

Get New Book

Quincy

	250	½	Hot
8805	1183	1367	633
8806	1183	1310	633
	400		
8807	1293	1380	1150
8808	1253	1327	1093
	250		
8809	1203	1303	1083
8810	1150	1237	1017
8822	1253	1423	917
8823	1187	1517	907
8833	1217	1377	920
8834	1213	1450	1027
9025	1100	1237	603
9026	1127	1287	653
9027	1093	1260	650
9028	1120	1293	640
9072	1120	1317	640
9073	1140	1347	667

300	½	Hot	350	½	Hot	400	½	H	
1160	1397	633	Set aside						
1180	1360	630							
450	½	H	500			550			
1263	1347	780	1303	1383	890	1330	1357	833	
1213	1290	817	1293	1373	910	1280	1340	863	
450			500			550 New [illegible] 400			
1157	1263	880	1173	1283	850	1140	1240	793	
1067	1157	767	1100	1197	770	1077	1157	733	
1257	1490	1000	Set aside –						
990	1557	993							
1253	1457	1103	1237	1417	1133	977	1437	550	Put in new 4 hr. 400°F Run
1177	1520	1153	1087	1417	1077	900	1467	880	
			450			588			
		8833	1230	1310	1093	1216	1280	1053	
		8834	1287	1383	1060	1297	1397	1200	O-SIR
			550						
		8833	1180	1230	1043				
		34	1267	1390	1090				
		600							
	8807	1273	1347	713					
	8808	1220	1287	1243					
	8809	1083	1190	817					
	8810	1016	1090	710					
		600							
	8833	1090	1177	853					
	34	1200	1343	930					
	~~34~~								

	250	½	Hot	
9076 9077	1043 1153	1220 1290	597 660	Co
9080 9081	1167 1167	1323 1307	657 657	Co
9084 9085	1120 1090	1310 1283	693 693	Ce
9092 9093	1123 1190	1310 1303	673 680	
9104 9105	1097 1100	1257 1277	677 637	Pt
9116 9117	1200 1230	1450 1450	1010 967	250 Ring Put new 72 in
9120 9121	1310 1320	1400 1433	1087 917	
	300			
9008 9009	1167 1100	1300 1267	697 737	
	300			
9012 9013	1163 1227	1350 1430	753 740	

400 ½ Hot

9116 9117	350 1090 1260	1230 1397	960 1057		600 1027 1230	1187 1383	817 903		
350 1263 1333	1343 1437	983 1027	450 1117 1233	1233 1347	937 977	500 1133 1250	1247 1413	913 927	put new 72 in after 150
300 1260 1223	1380 1420	1017 900	350 1117 1150	1250 1253	987 967	400 1093 1043	1230 1367	737 877	Ring-but not affected, [illegible] heated column mode
Set a	9120 9121	450 1033 993	1167 1363	893 897	Co new 7- after 150				
494 Hot 1133 1163	1267 1293	917 817							

Clinef

	200		
9413	1083	1297	643
9414	1163	1380	693
	400		
8087	1100	1370	1027
8088	860	1367	1017
8089	933	1473	1183
	250		
9023	997	1327	607
9024	1000	1353	580
	250		
9357	1190	1313	563
9358	1133	1333	567
	300		
8906	1187	1510	1113
8907	1237	1423	1107
	300		
9116	1267	1397	983
9117	1333	1437	1033
	200		
9437	1013	1243	593
9438	1020	1237	590
9534	1023	1193	
9535	1050	1150	
9589	1067	1200	
90	927	1103	

	350		
9628	1200	1370	1100
29	1197	1363	1070
30	1223	1410	1070

These cells after [illegible] had 2 Cold runs in 21K Saturated [illegible]. then run in 21K [illegible].

ditto

Sol [illegible] Co – 500 ½ H

after 450 [illegible] new F2 –

450						550		
993	1323	1183	1190	1310	947	1290	1433	1240
833	1507	1223	1253	1370	757	1207	1343	1080
1000	1470	1193	1283	1527	1030	1347	1457	1247

Sol [illegible] Bi [illegible] –

	600		
8087	1330	1457	1083.
88	1293	1437	1093
89	1390	1517	1057

Sol [illegible] Co –

	650			
8087	1313	1433	1027	S–S
8	1313	1480	1230	
9	1373	1493	1133	

Sol [illegible] Co –

400R		
1120	1287	737
1263	1410	853
250		
933	1133	497
917	1067	510

Co

	700		
8087	1250	1390	820
8	1227	1430	853
9	1267	1480	897

8 more runs 700

8087	1293
88	1307
89	1353

Annef

new Fe after 200 hot runs

Run in 21% z LiOH 6 times hot

all then put in 21 K Saturated LiOH, + run 6 hot then back in 21 K z LiOH in ~~cold~~ run after

		~~Fe~~	300	1/2	H.					
		9136	1090	1320	783	1123	1273	1027	Split	4 R
		9137	1120	1370	790	987	1230	1063	"	4 R
		9138	1123	1360	833	867	980	1050	"	4 R
		9145	1047	1303	773	923	1143	1097		1.R.
		9146	1017	1260	753	880	1050	1073	Split	
		9147	1057	1353	750	987	1237	1053		
		9154	1103	1367	790	923	1143	1033	Split	3 R
		9155	1080	1310	810	933	1077	1020	"	3 R
		9156	1133	1397	900	1017	1273	1093	"	1 R
		9172	1173	1380	723	940	1250	1130	Swelled	2 R
		9173	1107	1327	690	953	1237	1037	"	2 R
		9174	1107	1350	617	943	1310	1093	"	1 R
		9178	1133	1330	573	990	1360	1157	Swelled	1 R
		9179	1067	1297	597	950	1287	1047	"	2 R.
		9180	1037	1327	690	867	1190	1157		
		9184	1067	1133	720	940	1163	1193	Split	2 R
		9185	1123	1333	770	950	1243	1090	Swelled	3 R
		9186	1127	1397	777	923	1157	1040	"	2 R.
			500 Rn			650 Rn				
BS		8084	1017*	1113	633	943	1050	590		
		8085	1180	1287	857	1117	1200	943		
		8086	1133	1237	740	1183	1257	920		
			~~450 Rn~~							
Cold Test		8807	~~1263~~	1347	780					
		8808	~~1213~~	1290	817					
	New Fe after 450 runs	8807								

Soaked out alkali
Removed mix for Dr
& to test % K & LiOH
in the Ni -

After 200 hrs. made 3 Runs in 21 R 5 solvent L. Off — then run on board in 21 R 2 L. Off.	9604 9605 9606	900 983 970	1150 1173 1197		
Ditto	9611 9112	783 753	1183 950		Go
Ditto	9615 9616	850 867	1100 1100		
Ditto	9619 9620	797 950	950 873		
	9530 9531	250 967 933	1123 1170	757 777	Go
	9548 9549	250 1117 1083	1257 1183	637 667	Go
	9550 9551	1010 1000	1123 1183	683 687	Go

24	fl	17	bends before breaking -
3	"	10	"
4	"	12	"
9	"	10	"
19-20		11	"
23		13	"
35		19	"

Weakest Tensile ③

good tubes without LiOH Jany 25

			25	50	100
	708 - Soaked NH_4 —	1179	1137	1136	
	718 Ra CP Soda	1215	1168	1174	
	Mass action green 6079	1186	1130	1147	
	" 707 no wash filtered,	1191	1174	1182	
8190	$NiCl_2$ in green	1162	1052	1101	
8292	green soak 3 grms Aluminum in KOH	1059	1133	1114	
	NiO_2H_2 in Conc NH_4 NH_4Cl	1181	1113	1137	
8439	BaSO_4 - pores	1211	1219	1238	
8514	Ra 721 ½w filtered	1239	1218		
8557	" 6999 - Decant -	1267	1222		
8553	" Percol	1283	1213		
8559	"	1121	1103		
8574	" not filtered Decant	1259	1223		
8580	1062 Ra Percol	1241	1201		
8586	" Decant	1287	1243		
7782	Ra xxx 7f	1054		1034	1088
7788	" heated, 7f	1074		1067	1132
7794	" not heat 10f	994		994	1038
7868	Ra 716 ½w not fil Co free by hypo	1110		1093	1110
8409	BaCl Chromate K	1211	1217	1230	

721 Ra	2.16 %	Ni CO_3
708	1.5	,
719	0.88	"
707	2.40	"

8127
852
16254
40635
65016
6.92241

8069
851
8069
40345
64552
6.8586

8127
45

240
42
282 (2400
2256
1440
1410.0
(853
1,2,300

(85.1

242
42
284 (2420
2272
1480
1420.0
1,46

14 | 250 | 18
140
110
112

3 | 3860
1287

3 | 3723
1241

3 | 3730
1243

3 | 3604
1201

3 | 3800
1267

3 | 3666
1222

3 | 3777
1259

3 | 3848
1283

3 | 3669
1223

3 | 3640
1213

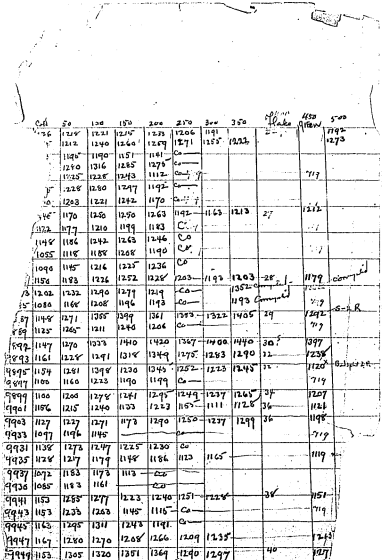
3.00

3 | 3363
1121

3 | 3310
1103

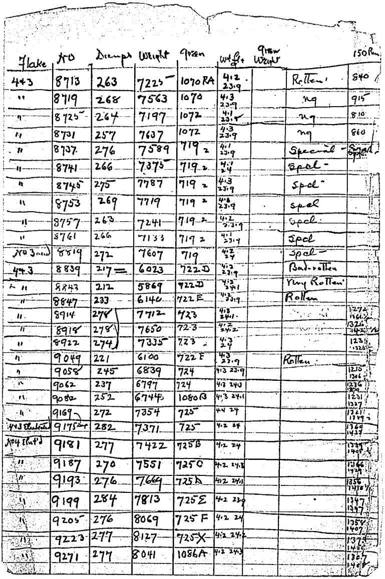
3 | 4157
1386

[ITEM FOUND IN BOOK]



	Coll	50	100	150	200	250	300	350	Flake	450 [illegible]	500
	136	1218	1221	1215	1233	1206	1191		2[illegible]		1192
	[illegible]	1212	1240	1260	1259	1271	1255	1222			1273
		1196	1190	1151	1141	Co					
		1240	1316	1285	1275	Co					
		1225	1228	1243	1112	Co				719	
	5	228	1280	1297	1192	Co					
	10	1203	1221	1242	1170	Co					
	145	1170	1250	1250	1263	1192	1163	1213	27	1212	
	1172	1177	1210	1199	1183	Co					
	1148	1186	1242	1263	1246	Co					
	1055	1118	1188	1208	1190	Co.					
	1090	1145	1216	1225	1236	Co					
	1156	1183	1226	1252	1228	1203	1193	1203	28	1179	compiled
13	1202	1232	1290	1279	1219	Co		1352 compiled		[illegible]	
15	1080	1168	1208	1196	1193	Co		1193 Compiled		719	
87	1148	1271	1355	1399	1361	1353	1322	1405	29	1292	S-R
869	1125	1265	1211	1240	1206	Co				719	
892	1147	1270	1333	1410	1420	1367	1400	1440	30	1397	
9893	1161	1228	1291	1318	1349	1275	1283	1290	32	1238	
9895	1154	1281	1398	1230	1345	1252	1223	1245	32	1120	Ballpit 2R
9897	1100	1160	1223	1190	1199	Co				719	
9899	1100	1200	1278	1241	1295	1249	1237	1265	34	1207	
9901	1156	1215	1240	1133	1223	1155	1111	1128	36	1124	
9903	1127	1227	1271	1173	1290	1250	1237	1299	36	1198	
9933	1097	1196	1145			Co				719	
9931	1138	1273	1247	1225	1230	Co					
9935	1128	1217	1179	1148	1186	1123	1165			1119	
9937	1072	1183	1173	1113	Co						
9936	1085	1183	1161		Co						
9941	1153	1285	1277	1223	1240	1251	1228		38	1151	
9943	1153	1233	1263	1145	1116	Co				719	
9945	1163	1295	1311	1248	1191	Co					
9947	1167	1280	1270	1208	1266	1209	1235			1243	
9949	1153	1305	1320	1351	1369	1290	1297		40	1271	
1A	1163	1248	1226	1245		Co					
3A	1125	1261	1278	1305		Co	1270				
5	1096	1165	1095	1093		Co					
6	1056	[illegible]	1124	1149		Co					

[ITEM FOUND IN BOOK]



Flake	NO	Dumps	Weight	Green	Wt Gt	Green Weight		150 Rm
443	8713	263	7225	1070 RA	4.2 23.9		Rotten	840
"	8719	268	7563	1070	4.3 23.9		ng	915
"	8725	264	7197	1072	4.1 23.9		ng	810
"	8731	257	7637	1072	4.3 23.9		ng	860
"	8737	276	7589	719 2	4.1 23.9		Special -	Spcl
"	8741	266	7375	719 2	4.1 24		Spcl -	
"	8745	275	7787	719 2	4.3 23.9		Spcl	
"	8753	269	7719	719 2	4.3 23.9		Spcl	
"	8757	263	7241	719 2	4.2 23.9		Spcl	
"	8761	266	7133	719 2	4.1 23.9		Spcl	
No 3 [illegible]	8819	272	7607	719	4.2 24		Spcl -	
443	8839	217	6023	722 D	4.2 23.9		Bad-rotten	
"	8843	212	5869	722 D	4.3 24.1		Very Rotten	
"	8847	233	6140	722 E	4.2 23.9		Rotten	
"	8914	278	7712	723	4.3 24.1			1272 1364
"	8918	278	7650	723	4.2 24.2			1320 1424
"	8922	274	7335	723	4.3 24			1231 1326
"	9049	221	6100	722 F	4.3 23.9		Rotten	
"	9058	245	6839	724	4.3 23.9			1218 1306
"	9062	237	6797	724	4.3 24.0			1236 1320
"	9082	252	6744	1080 B	4.3 24.1			1231 1327
"	9169	272	7354	725	4.4 24			1321 1349
443 [illegible]	9175	282	7371	725	4.2 24			1369 1437
No 4 [illegible]	9181	277	7422	725 B	4.2 24			1339 1408
"	9187	270	7551	725 C	4.2 24.3			1366 1429
"	9193	276	7669	725 D	4.2 24.1			1356 1418
"	9199	284	7813	725 E	4.2 23.9			1347 1397
"	9205	276	8069	725 F	4.2 24			1358 1407
"	9223	277	8127	725 X	4.2 24.2			1379 1446
"	9271	277	8041	1086 A	4.2 24.3			1367 1468

[ITEM FOUND IN BOOK]

Not ox z Lott

	Card	50	100	150	[illegible]	
9660-719	1136	1218	1221	1215	1233	22 f crumpled by hand
9662 723	1135	1212	1240	1260	1259	
9676 719	1110	1195	1190	1151	1141	24 f had to crumpled by hand to feed
9678 723	1156	1280	1316	1285	1275	24 f - - - - - -
9865 719	1145	1225	1228	1243	+1112	25 f
9867 723	1175	1225	1250	1297	+1192	25 f -
9869 719	1160	1208	1221	1242	+1170	27 f not ox heavy Considerably turned over a curly it tears apart in hopper - not very bulky its the heavy part left back in Separator - it was discarded because all cut up - couldn't get sample of good stuff before [illegible]
9871 723	1145	1170	1250	1250	1263	
9873 719 2	1122	1177	1210	1199	1183	33 f not ox bulky
9875 723	1148	1186	1242	1263	+1246	33 f "
9877 719 2	1055	1118	1188	1208	1190	26 f not ox bulky
9879 723	1090	1145	1216	1225	+1236	
9881 719 2	1150	1183	1226	1252	+1228	28 f not ox very poor " curly Heavy, tears apart in hopper when feeding this sample taken from the heavy of the batch that was put back in Separator & was discard for being mostly fines didn't get sample of good stuff as it been ox from the batch.
9883	1202	1232	1290	1279	+1219	
9885 719 2	1080	1168	1208	1196	+1193	29 f not ox bulky
9887 723	1148	1271	1355	1399	+1361	29 f " "
9889 719 2	1125	1205	1211	1240	1206	30 f not ox
9891 723	1147	1270	1333	1410	1420	30 f "
9893 719 2	1161	1228	1291	1318	1349	32 f not ox
9895 723	1154	1281	1398	1230	1345	32 f "

[ITEM FOUND IN BOOK]

✓

Nat Ox

		Card	50	100	150	200	
9897	719 2	1100	1160	1223	1190	1199	34 f not ox bucky
9899	723	1100	1200	1278	1241	1295	34 f " "
9901	719 2	1156	1215	1240	1133	1223	36 f not ox bucky
9903	723	1127	1227	1271	1173	1290	36 f " "
9933	719	1097	1196	1145		–	35 f Nat ox bucky
9931	723	1138	1273	1247	1225	1230	"
9935	719-4	1128	1217	1179	1148	1156	37 f not ox bucky slightly curly
9937	723	1072	1183	1173	1113		
99[illegible]	719.4	1055	1183	1161			38 f nat ox bucky
9941	723	1153	1265	1277	1223	1240	
9943	719.4	1153	1233	1203	1145	1115	39 f nat ox
9945	723	1163	1295	1311	1243	1191	"
9947	719 4	1167	1260	1270	1208		40 f nat ox quite lot heavy flake out
9949	723	1153	1305	1320	1351		"
1 A-	719 4	1163	1248	1226	1245		41 f nat ox
3	723	1125	1261	1275	1305		"
5	719	1096	1165	1095	1093	-	42 f nat ox Curly & bucky
7	723	1056	1133	1124	1147	-	

22059

average 50 [illegible]

1217

average on 100

1240

average 150 Runs

1232

average 200

1233

[ITEM FOUND IN BOOK]

Oxidized + Chnutt –

		Cold	50	100	150	200	
9672	723	1092	1125	– Co			22 f ox + Chnutt H.
9674	719	1090	1003	– Co			22 f "
9706	723	1151	1180	1030	Co		24 f ox + Chnutt H
9708	719	1068	963	766	Co		24 f " " "
9905	719²	1123	1193	1183	1161	-1197	26 f ox + Chnutt H bulky
9907	723	1162	1255	1241	1193	1219	26 f " " "
9909	719.4	1150	1198	1188	1132	1207	27 f ox + H. bulky
9911	723	1153	1226	1287	1200		27 f " "
9913	719.4	1176	1243	1232	1075	–	28 f ox + H. slightly bulky
9915	723	1185	1253	1188	1093	–	28 f " " "
9917	719.4	1180	1205	1106	991	–	29 f ox + H – slightly bulky
9919	723	1196	1173	1000	967	–	29 f "
9921	719.4	1188	1192	1040	955	–	32 f ox + Chnutt – this sample mixed up sent 2 samples marked 32
9923	723	1186	1171	1053	1093	–	
9	719	1215	1253	1120	1146		30 f ox + Chnutt. bulky
11	723	1216	1296	1368	1348		
13	719	1201	1283	1271	1236		32 f ox + Chnutt.
15	723	1210	1343	1293	1236		
17	719	1049	1162	1155	1170		34 f ox + Chnutt.
19	723	1067	1163	1151	1176		
21	719	1063	1175	1168	1170		35 f ox + Chnutt H
23	723	1048	1160	1175	1178		
25	719	1200	1215	1210	1206		36 f ox + Chnutt
27	723	1218	1238	1263	1260		
29	719	1240	1255	1078	1103		33 f ox + Chnutt
31	723	1246	1271	1250	1265		
			31194		24666		

6
tt 5

[ITEM FOUND IN BOOK]

120=	Oxidzd	150 Run not ox
26, Flake	1193	1225
27	1200	1250
28	1093	1279
29	967	1361
30	1348	1410
31		
32	1236	1230
33	1265	1246
34	1176	1241
35	1178	1225
36	1260	1173
37	1192	1113
1A–	1255	

[ITEM FOUND IN BOOK]

Oxq Clutt

			50	100	150	
33	719-4	1130	1141	1140	1153	-1
35	723	1173	1183	1210	1192	+27
37	719	1135	1210	1189	1148	-21
39	723	1140	1240	1260	1255	+20

37 f Oxq Clutch bulky q Clearly

NO 1 A f bulky

average cap [illegible]
Run 1199-

average on 100 run
1166—

150
1122

[ITEM FOUND IN BOOK]

1 Afflake – Dally Ox & Clouett 1 Ox black

		Cold	50	100	150		
59	718	1192	1301	1296	1236	−5	Ox black needed both bubbling thru H2SO4 – pipes wet.
62	719	1207	1227	1195	1100	−32	
65	723	1172	1237	1250	1241	+43	4 hours 800 Fahr
68	718	1119	1252	1255	1222	+3	2 hours 800 fahr
71	719	1074	1149	1161	1105	+12	
74	723	1062	1178	1224	1187	+46	
77	718	1156	1282	[illegible]	1144		1 hour 800 fahr Bluish backing
80	719	1141	1217	1208	1163	−9	
83	723	1098	1244	1268	1182	+24	
86	718	1171	1276	1259	1169	−17	Reduced K not purified Sulf pipes wet with acid – (See of water original)
89	719	1136	1202	1175	1104	−27	
92	723	1132	1226	1272	1217	+46	4 hours 800 fahr
95	718	1196	1299	1267	1115	−31	ditto 2 hours 800
98	719	1181	1259	1162	—	+3	
101	723	1172	1287	1359	1331	+72	
104	718	1201	1273	1271	1193	−2	Reduced unpurified & all pipes washed fresh acid –
107	719	1195	1231	1238	1163	+7	2 hours 800 Fahr
110	723	1180	1250	1301	1209	+51	
113	718	1217	1301	1190	1069	−11	Ditto 4 hours 800 –
116	719	1266	1248	1209	1121	−37	
119	723	1239	1273	1280	1170	+7	
122	718	1211	1309	1290	1163	−19	Ditto 1 hour 800
125	719	1249	1256	1243	1145	−13	
128	723	1209	1257	1308	1234	+51	
			30234				

[ITEM FOUND IN BOOK]

Daily Experiments 1 A f ox 6 clock

		Cold	50	100			
131	718	1185	1257	1298	1265	+ 41	Reduced H [illegible] [illegible] out pipe, clean
134	719.4	[illegible]	1209	1219	1151	+ 10	4 hours 700 Fah
137	723	1182	1234	1268	1230	+ 34	
140	718	1210	1315	1300	1224	− 15	ditto
143	719	1148	1215	1212	1155	− 3	2 Hours 700
146	723	1130	1234	1268	1208	+ 34	
149	718	1236	1287	1048	966	− 239	Ditto
152	719	1186	1239	1184	1125	− 51	1 Hour 700
155	723	1156	1271	1234	1170	− 37	
158	718	1221	1256	1008	877	− 248	Reduced unpurified H washed only - pipe clean
161	719	1255	1224	1045	976	− 179	4 hours 1000 fah
164	723	1197	1259	1105	1038	− 154	flake frozen - bright no matte bulky crumpled
167	718	1232	1290	1136	1039	− 154	Ditto
170	719	1231	1248	1080	1004	− 168	2 Hours 1000
173	723	1203	1308	1289	1176	− 19	
176	718	1220	1183	970	872	− 213	Ditto
179	719	1224	1221	1043	985	− 178	1 Hour 1000
182	723	1195	1238	1032	1016	− 206	
185	718	1111	1209	1011	984	− 198	Reduced H Pure by NaOH & Chromic acid pipe, clean
188	719	1093	1159	924	899	− 135	4 hours 1000
191	723	1088	1214	975	931	− 239	
			26070				

[ITEM FOUND IN BOOK]

Dally ox black –

		Cold	50	100	150			
194	718	1130	1330	1286	1253	11	–44	Brittle sheets 69 F [illegible] unpurified H water only – flake was [illegible] [illegible] but got very spread 12 on 30 – much turned over – too much [illegible]
197	719	1091	1291	1343	1256		+52	
200	723	1047	1272	1325	1263		+ 53	2 Hours 800
203	715	1127	1298	1319	1239		+ 22	Ditto flake [illegible] turned over
206	719	1090	1270	1279	1161		+ 9	4 hours at 700 –
209	723	1040	1265	1300	1249		+ 35	
212	715	1141	1311	1326	1235		+ 15	Tough sheets – water purified [illegible] –
215	719	1067	1247	1221	1119		–26	4 hours 800
217	723	1029	1248	1285	1244		+ 37	
221	715	1222	1292	1289	1206		–3	Ditto
224	719	1201	1231	1229	1150		–2	2 hours 800
227	723	1186	1244	1292	1247		+48	

15249

average 50 lk

1252

average on 100. Run

1217